A3356-1U 9/90

# BULLETIN

**TO:** AMWA Members and Subscribers

**DATE:** May 24, 1990

**FROM:** National Office

**BULLETIN NO.:** 90-25

**SUBJECT:** AMWA Financial Survey Results

For your information, enclosed are the results of the association's Water Rate Survey. The data, submitted by 47 respondents, provides detailed information concerning the rate structures and system characteristics of major water supply utilities. The information covers a broad range of topics including retail and wholesale services, treatment, customer data and billing, financial planning and revenue sources, workforce characteristics, water meters and system planning and reporting.

The results are presented in a series of table. The seven general categories around which the tables were developed include:

## I. General

Organization name, organization structure and services provided, source of supply, elements owned & operated, geography, service density and climate.

## II. Water Supply System

A. General

Current service area, number of connections, vintage of supply & transmission, vintage of distribution system, watershed ownership & control, average daily water supplied, system daily safe yield, peak daily delivery, maximum capacity, per capita average daily consumption, peak to average day design factor, and principal water source.

B. Treatment

Disinfection, viral removal, toxic waste removal, turbidity removal, fluoridation, taste and odor, algae removal, color, corrosion control, and compliance with the Safe Drinking Water Act.

C. Workforce

Current system workforce, contracted work, lead service connections, removal programs, program cost and years to complete, and composition of workforce.

**ASSOCIATION OF METROPOLITAN WATER AGENCIES**

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## III. Customer Data

Customer water usage, customer breakdown, retail customer data, discounts, payments to/from government, free water service, and fixed income plan.

## IV. Financial

Revenue sources, financial planning, bond obligations and capital improvement program.

## V. Customer Billing Data

Rates regulated by state agency, minimum charge for metered account, amount and basis of charges, uniform rate structure, typical quarterly bills, average residential bill, percent of delinquent payments, collection methods, and rate differentials in city/out city.

## VI. Water Meters

## VII. System Planning and Reporting

Annual report, annual financial report & plan, water conservation plan, water resources plan, drought contingency plan, contamination emergency response plan and watershed management plan.

Edward J. Donahue III and Jack Qutub of Peat, Marwick Main & Co. provided the human resources needed to compile and produce the survey results.

# INTRODUCTION

The following summary is based on data provided by 47 respondents to a Water Rate Survey conducted by the Association of Metropolitan Water Agencies (AMWA) in September 1988. The responses provide detailed information concerning the rate structures and system characteristics of major water supply utilities across the country, and are useful for comparative purposes. The data summarized in this section covers various aspects of the respondents water rates and overall system characteristics.

## I. GENERAL

Of the 47 organizations responding to the survey, 27 (57%) are structured as municipal utility departments. Three of the respondents operate as independent authorities, while 12 are either state, district or municipal authorities. The remaining organizational structures range from public corporations to a water commission.

Twenty-four (51%) of the organizations provide water services only. Twenty-two (47%) provide both water and wastewater services. One respondent provides electric and water services.

All of the surveys report ownership and operation of distribution systems, while 46 own and operate treatment and transmission systems. In addition 35 (74%) own and operate their source of supply element.

## II. WATER SUPPLY SYSTEM

### A. General

The system data collected from the surveys illustrates the diversity of those responding. Of the 47 respondents that provided data, 94 percent provide retail services to the residential population in their respective areas. The range of retail populations served spans from a high of 3,400,000 to a low of less than 39,000. Approximately 50 percent of the systems providing retail services also provide wholesale water services to residential population. Furthermore, two of the systems provide only wholesale residential services.

The topography and climate of the respondents showed that the most common characteristics are a mixed geography, 27 respondents; mixed service density, 28 respondents; and a moderate climate, 25 respondents.

The data collected on the vintage of the respondent's supply and transmission systems varies widely. Twenty-eight of the respondents to this question said that at least 30 percent of their system had been built since 1960, of those 15 stated that at least 30 percent of their system had been built between 1925-49. The data collected on the vintage of distribution systems show a similar range of responses.

Eight of the utilities own their watershed, while 11 control the watershed activities. Slightly more than half of the respondents conduct industrial, commercial, residential, and recreational activities. Only 3 of the 47 respondents' watershed qualify for EPA's exemption from filtration.

The information tabulated on water supply and delivery again illustrates the diversity in the size of the organizations responding. The average daily water supplied ranged from a high of 1,665 MGD's to a low of 15.55 MGD's.

The principal water sources of these organizations appear to be evenly distributed between reservoirs, groundwater, and lakes/rivers. In nearly all cases, the principal water source provides all or most of the water to a system. Only three of the surveys indicate that 80 percent or more of their water was purchased.

B. Treatment

Overall, the types of treatment reported were similar throughout the survey population. Thirty-nine of the respondents use chlorine as part of their disinfection treatment. Among those using chlorine, 3 use chlorine dioxide, 1 uses ozonation, while 4 use some combination of the treatments. The other most frequently used treatment is chloramines (17 systems). For viral removal 70 percent of the systems use filtration.

Very little treatment was reported for toxic waste removal. Six systems use airstripping, 3 systems use GAC, and 9 report some other method. For turbidity removal 31 systems (66%) use a combination of chemical treatment, filtration, and sedimentation. For fluoridation, 27 systems use fluosilic acid, and three reported using sodium silicate.

In treatment for taste and odor, 31 systems use chlorination, 26 systems use some type of carbon, and one system employs ozonation. Some of the other methods reported include potassium permanganate, copper sulfate, and aeration. For algae removal, the most common treatments are filtration (26 systems) and chemical treatment (28 systems). Two systems report using harvesting, while none of the respondents employ microstraining.

For color treatment, chemical treatment and filtration are used by 21 systems each. In treating for corrosion control, 29 respondents use pH adjustment, 13 employ total alkalinity adjustment, and 18 use a corrosion inhibitor.

In order to comply with the Safe Drinking Water Act, respondents most frequently said that no changes need to be made on their systems. Those who did need modifications or additions reported the most necessary would be for disinfection requirements or disinfection by-product control, with estimated costs ranging from $300,000,000 to $5,000.

Responses to questions regarding lead service connections and removal programs varied widely. Surveys show that 21 systems have lead service connections ranging from a high of 475,000 connections to a low of 50. Twenty-two systems have a removal program underway with estimated program costs ranging from $44,000,000 to

$50,000. The estimated years to complete removal programs ranges from 25 years to 2 years.

C. Work Force

The sizes of the work force employed by the responding organizations range from a high of 3,544 (including 1,896 shared administration functions) to a low of 34 (including 2 shared administration functions). The systems reported using contractors for engineering and construction work in most instances, although one system reported that 70 percent of its contracted work is for maintenance. As might be expected, the work force composition for most of the systems is heavily concentrated on the plant operations and maintenance areas. Twenty-six of the 47 respondents employ 40 percent or more of their work force in these two areas.

## III. CUSTOMER DATA

Of the 43 organizations that provided data on customer water usage, 23 (53 %) said that residential customers make up over 50 percent of the systems' total water usage. Correspondingly, 22 systems said that over 50 percent of total customers were either single or multi-family residential.

Only 12 of the systems offer discounts to their customers. The most common types of discount are for senior citizens, and prompt payments. The remaining information provided for customer data on the surveys did not lend itself to tabulation or summarization into general purpose information.

## IV. FINANCIAL

Of the 45 organizations that provided data on their revenue sources, 39 receive most of their revenue from user charges based on meter readings. Thirty-seven systems receive some portion of their revenue from interest income, while only three systems collect from property taxes. Most of the data collected for the operations and maintenance budget and the capital improvements budget is useful for comparison purposes, but is not readily translated into general terms that can be summarized here.

Forty-three respondents have some type of financial planning process in operation that projects into the future ranging from 2 years to 25 years.

The data received on outstanding bond obligations indicated that eleven entities have only general obligation bonds outstanding. Twenty-six have only revenue bonds outstanding, while 5 systems have a combination of both.

Twenty-seven of 42 respondents' systems plan to fund 50 percent of their capital improvement program by new or existing bond issues. Only one of the respondents has had problems with debt issues, and only two entities report problems with raising revenues.

## V. CUSTOMER BILLING DATA

Only 4 of the system rates are regulated by a state agency. Thirty-seven systems have a minimum charge for metered accounts.

Twenty-five systems have a uniform rate structure. Twenty-nine have a block rate structure and seven of those systems operate with an inclining block rate structure. Six systems employ a winter/summer rate differential.

The typical residential bill ranged from $14.25 (low usage) to $173.37 (high usage). The quarterly commercial bill ranged from $56.11 (low usage) to $774.74 (high usage). Industrial bills ranged from $591.00 to $42,649.89 quarterly.

Twenty-three systems require a security deposit. The most common is in the amount of an average two month bill. Twenty-one systems surveyed have delinquency or non-payment problems. However, all of the 43 responding in this section, reported at least two alternative collection methods and in almost all cases the collection methods available were also put to use in collecting delinquent payments.

Rate differentials between inside city and outside city customers were reported on 23 surveys. The premiums charged to outside city customers range from 150 percent to 14 percent. The basis for the rate differential is spread almost evenly between historic costs, state statute/local ordinance, and cost of service calculation. Only 5 of the surveys say their rate differential has been challenged.

## VI. WATER METERS

In 45 of the 47 systems surveyed, meters are owned and maintained by the utility, as well as read by the utility. Most meters are read either bi-monthly, monthly, quarterly, while only one system reads meters semi-annually. Also, another system reads meters either continuously or weekly.

Forty-two of 45 systems have a majority of their meters in the city. Generally, the method of reading meters reported was either partial remote or manually with most systems using only one of these methods. The remaining survey data on meters varies with the size and customer make up of each system.

## VII. SYSTEM PLANNING AND REPORTING

A majority of the respondents have all the listed plans in operation with the exception of the watershed management plan which only 21 of the systems currently use.

Most systems have included at least one of the elements listed in their water conservation program, the two most popular being public awareness programming and youth education. Thirty-three systems have a leak detection program, and 28 have a leakage estimate. Of the 17 responses, 12 report over 50 percent of their leakage in the distribution system.

# I. GENERAL

AMWA RATE SURVEY

TABLE ONE

I. GENERAL

| ORGANIZATION NAME | FORM COMPLETED BY: | TITLE | TELEPHONE | ORGANIZATIONAL STRUCTURE | SERVICES PROVIDED |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | DAVID L. CRANDELL | MANAGER, PUBL. UTIL. BUR. | (216) 375-2627 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| ANCHORAGE WATER & WASTEWATER UTILITY | BRIAN I. CREWDSON | ASSISTANT TO THE GEN MNGR | (907) 786-5511 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | JAMES M. HURLEY | CHIEF OF ADMIN.,FINANCE | (301) 760-7740 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| ARLINGTON WATER UTILITIES | CHERYL TAYLOR WEST | ADMINISTRATIVE ANALYST | (817) 459-6602 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| BOARD OF WATER SUPPLY HONOLULU | KAZU HAYASHIDA | MANAGER & CHIEF ENG. | (808) 527-6180 | SEMI-AUTONOMOUS | WATER ONLY |
| BOSTON WATER AND SEWER COMMISION | JOHN P. SULLIVAN, JR. | CHIEF ENGINEER | (617) 330-9400 | MUNICIPAL AUTHORITY | WATER & WASTEWATER |
| CHICAGO WATER DEPARTMENT | SAMUEL W. HURLEY, JR. | COMMISSIONER | (312) 744-7001 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| CLEVELAND, DIVISION OF WATER | J.CHRISTOPHER KOCSAN | ASSISTANT ADMINISTRATOR | (216) 664-3619 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| DALLAS WATER UTILITIES | DENNIS T. CAVE | DEPUTY DIRECTOR WTR OPER. | (214) 670-8665 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| DES MOINES WATER WORKS | L.D. MCMULLEN | GENERAL MANAGER | (515) 283-8755 | PUBLIC UTILITY | WATER ONLY |
| EAST BAY MUNICIPAL UTILITY DISTRICT | COOKIE PETTEE | PRINCIPAL MNGMT ANALYST | (415) 891-0688 | DISTRICT AUTHORITY | WATER & WASTEWATER |
| ERIE COUNTY WATER AUTHORITY | JAMES M. BYRON | BUSINESS OFFICE MANAGER | (716) 849-8420 | INDEPENDENT AUTHORITY | WATER ONLY |
| FAIRFAX COUNTY WATER AUTHORITY | FLOYD F. EUNPU | DEPUTY ENGINEER-DIRECTOR | (703) 698-5600 | MUNICIPAL AUTHORITY | WATER ONLY |
| FORT WORTH WATER DEPT | JEAN BANKS | ADMINISTRATIVE ASSISTANT | (817) 870-8245 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| HELIX WATER DISTRICT | GEORGE MARTIN | CUST. SERVICE ADMIN. | (619) 466-0585 | DISTRICT AUTHORITY | WATER ONLY |
| HOUSTON PUBLIC WORKS | C.J. SMITH | DEPUTY DIRECTOR | (713) 247-1525 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| HUNTSVILLE UTILITIES WATER DEPT | WM. E. COURTNEY, JR. | WATER DEPT MANAGER | (205) 535-1410 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | LULA F. LARSON | ADMINISTRATIVE ASSISTANT | (816) 274-2376 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| KNOXVILLE UTILITIES BOARD | BARBARA WINSTON | RATES ANALYST | (615) 558-2436 | MUNICIPAL AUTHORITY | WATER & WASTEWATER |
| LAS VEGAS VALLEY WATER DISTRICT | PATRICK J. PINE | GENERAL MANAGER | (702) 258-3100 | DISTRICT AUTHORITY | WATER ONLY |
| LONG BEACH WATER DEPARTMENT | DAN DAVIS | BUREAU ENGINEER | (213) 426-5951 | MUNICIPAL AUTHORITY | WATER & WASTEWATER |
| LOS ANGELES DEPT OF WATER AND POWER | CARMENCITA BERNARDO | SENIOR UTILITY ACCOUNTANT | (213) 481-5948 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| LOUISVILLE WATER COMPANY | FOSTER BURBA | PRESIDENT | (502) 569-3615 | INDEPENDENT AUTHORITY | WATER ONLY |
| MANCHESTER WATER WORKS | DAVID KITTREDGE, P.E. | DIRECTOR/CHIEF ENG. | (603) 624-6494 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | WINDSOR SUNG | WATER RESOURCE PLANNER | (617) 242-7110 | STATE AUTHORITY | WATER & WASTEWATER |
| MEMPHIS LIGHT, GAS & WATER DIVISION | BILLY C. GRIMM | MANAGER WATER OP | (901) 320-3939 | MUNICIPAL AUTHORITY | WATER ONLY |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | TODD H. ROSENTHAL | ASST. TO DISTRICT MNGR. | (203) 278-7850 | MUNICIPAL CORPORATION | WATER & WASTEWATER |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | JENNIFER SMITH | ADMINISTRATIVE ANALYST | (213) 250-6058 | PUBLIC CORPORATION | WATER ONLY |
| MILWAUKEE WATER WORKS | DAVID KIRCHGESSNER | MNGMT ACCT. SPECIALIST | (414) 278-2820 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| NEWPORT NEWS WATER WORKS | C.C. CROWDER | DIRECTOR | (804) 247-8465 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| NORFOLK DEPT OF UTILTIES | CRAIG ZIESEMER | ASST. DIRECTOR | (804) 441-2674 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | CHRIS BEATHAM | ASST TO THE DIRECTOR | (407) 244-7200 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| ORLANDO UTILITIES COMMISSION | CLIFFORD A. RUSSELL | ASST. MANAGER. WTR OPER. | (407) 423-9100 | MUNICIPAL AUTHORITY | WATER & ELECTRIC |
| PASSAIC VALLEY WATER COMMISSION | WENDELL R. INHOFFER | | (201) 340-4304 | WATER COMMISSION | WATER ONLY |
| PORTLAND BUREAU OF WATER WORKS | ANNE CONWAY | FINANCIAL ANALYST | (503) 796-7468 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| RALEIGH DEPT OF PUBLIC UTILITIES | CINDY KLING | MANAGEMENT ANALYST | (919) 890-3400 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| SALT LAKE CITY PUBLIC UTILITIES | WENDELL E. EVENSEN | WATER SUPERINTENDENT | (801) 483-6772 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| SAN BERNARDINO MUNICIPAL WATER DEPT | BERNARD C. KERSEY | DIRECTOR, ADMIN. & FIN. | (714) 384-5393 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| SEATTLE WATER DEPARTMENT | LINDA D. MORENO | ADMINISTRATIVE SECRETARY | (206) 684-5850 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | DONALD E. JACKSON | DIRECTOR OF OPERATIONS | (203) 624-6671 | STATE AUTHORITY | WATER ONLY |
| ST. LOUIS WATER DIVISION | WILLIAM R. BOSSE | WATER COMMISSIONER | (314) 664-7899 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| TACOMA, WATER DIVISION | JANE EVANCHO | WATER RESOURCE PLANNING | (206) 591-9738 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| TAMPA WATER DEPT | DAVID L. TIPPIN | DIRECTOR | (813) 223-8663 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| TUCSON WATER DEPARTMENT | ERIC UNANGST | DEPT. ADMIN MANAGER | (602) 791-4331 | MUNICIPAL UTILITY DEPT | WATER ONLY |
| VIRGINIA BEACH | JOSEPH P. MARTIN | PUBL. UTIL. FIN. OFFICER | (804) 427-4636 | MUNICIPAL UTILITY DEPT | WATER & WASTEWATER |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | MICHAEL O. VANN | ASST GEN MNGR FIN & ADMIN | (205) 251-3261 | INDEPENDENT AUTHORITY | WATER & WASTEWATER |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | ROBERTA COTNER | ASST. TO DIRECTOR | (918) 596-9870 | MUNICIPAL AUTHORITY | WATER & WASTEWATER |

TABLE TWO

| ORGANIZATION NAME | ELEMENTS OWNED & OPERATED: SOURCE OF SUPPLY | TRANS-MISSION | DISTRI-BUTION | TREATMENT | OTHER - DESCRIBE | GEOGRAPHY | SERVICE DENSITY | CLIMATE |
|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | X | X | X | X | SEWAGE COLLECT & TREAT | MIXED | MEDIUM | MODERATE |
| ANCHORAGE WATER & WASTEWATER UTILITY | X | X | X | X | | MIXED | MIXED | MODERATE |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | X | X | X | X | | MIXED | MIXED | MODERATE |
| ARLINGTON WATER UTILITIES | X | X | X | X | | MIXED | MIXED | MODERATE |
| BOARD OF WATER SUPPLY HONOLULU | X | X | X | X | | MIXED | MIXED | WARM |
| BOSTON WATER AND SEWER COMMISION | | | X | | | MIXED | MIXED | MODERATE |
| CHICAGO WATER DEPARTMENT | | X | X | X | | FLAT | HIGH | COLD |
| CLEVELAND, DIVISION OF WATER | X | X | X | X | PUMPING,STORAGE | MIXED | MIXED | COLD |
| DALLAS WATER UTILITIES | X | X | X | X | | MIXED | MIXED | WARM |
| DES MOINES WATER WORKS | | X | X | X | | MIXED | MEDIUM | MODERATE |
| EAST BAY MUNICIPAL UTILITY DISTRICT | X | X | X | X | | MIXED | MIXED | MODERATE |
| ERIE COUNTY WATER AUTHORITY | X | X | X | X | BILLING | MIXED | MIXED | MODERATE |
| FAIRFAX COUNTY WATER AUTHORITY | X | X | X | X | | FLAT | HIGH | MODERATE |
| FORT WORTH WATER DEPT | X | X | X | X | | FLAT | MIXED | MODERATE |
| HELIX WATER DISTRICT | X | X | X | X | | HILLY | MIXED | WARM |
| HOUSTON PUBLIC WORKS | | X | X | X | | FLAT | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | X | X | X | X | | HILLY | MEDIUM | MODERATE |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | | X | X | X | | MIXED | MIXED | MODERATE |
| KNOXVILLE UTILITIES BOARD | | X | X | X | | HILLY | MIXED | MODERATE |
| LAS VEGAS VALLEY WATER DISTRICT | X | X | X | X | | MIXED | MIXED | WARM |
| LONG BEACH WATER DEPARTMENT | X | X | X | X | RECLAIMED WATER DISTRIB. | FLAT | HIGH | WARM |
| LOS ANGELES DEPT OF WATER AND POWER | X | X | X | X | | MIXED | HIGH | WARM |
| LOUISVILLE WATER COMPANY | X | X | X | X | FLOATING FOUNTAIN | MIXED | MIXED | MODERATE |
| MANCHESTER WATER WORKS | X | X | X | X | | HILLY | MIXED | COLD |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | | X | X | X | | MIXED | HIGH | MODERATE |
| MEMPHIS LIGHT, GAS & WATER DIVISION | X | X | X | X | | MIXED | MIXED | MODERATE |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | X | X | X | X | METERS | HILLY | HIGH | COLD |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | | X | X | X | RESERVOIRS | MIXED | MIXED | WARM |
| MILWAUKEE WATER WORKS | X | X | X | X | | MIXED | MIXED | COLD |
| NEWPORT NEWS WATER WORKS | X | X | X | X | STORAGE, TERMINAL SUPPLY | FLAT | HIGH | MODERATE |
| NORFOLK DEPT OF UTILTIES | X | X | X | X | | FLAT | MEDIUM | WARM |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | X | X | X | X | | FLAT | MIXED | WARM |
| ORLANDO UTILITIES COMMISSION | X | X | X | X | | FLAT | MIXED | WARM |
| PASSAIC VALLEY WATER COMMISSION | X | X | X | X | | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | X | X | X | X | | MIXED | MEDIUM | MODERATE |
| RALEIGH DEPT OF PUBLIC UTILITIES | | X | X | X | | MIXED | MEDIUM | MODERATE |
| SALT LAKE CITY PUBLIC UTILITIES | X | X | X | X | | MIXED | MEDIUM | COLD |
| SAN BERNARDINO MUNICIPAL WATER DEPT | X | X | X | X | | MIXED | MEDIUM | WARM |
| SEATTLE WATER DEPARTMENT | X | X | X | X | | HILLY | MIXED | MODERATE |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | X | X | X | X | | HILLY | MIXED | COLD |
| ST. LOUIS WATER DIVISION | | X | X | X | | MIXED | MIXED | MODERATE |
| TACOMA, WATER DIVISION | X | X | X | X | | HILLY | MEDUIM | MODERATE |
| TAMPA WATER DEPT | | X | X | X | | FLAT | MIXED | WARM |
| TUCSON WATER DEPARTMENT | X | X | X | X | RECLAIMED WATER | MIXED | MIXED | WARM |
| VIRGINIA BEACH | | X | X | X | | FLAT | MEDIUM | MODERATE |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | X | X | X | X | | MIXED | MIXED | MODERATE |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | X | X | X | X | | MIXED | MIXED | MODERATE |

# II. WATER SUPPLY SYSTEM

A. General
B. Treatment
C. Workforce

TABLE THREE II. WATER SUPPLY SYSTEM A. GENERAL

| ORGANIZATION NAME | SYSTEM DATA: CURRENT SERVICE AREA WHOLESALE (SQ. MILES) | CURRENT SERVICE AREA RETAIL (SQ. MILES) | RESIDENTIAL POPULATION SERVED WHOLESALE | RESIDENTIAL POPULATION SERVED RETAIL | NO. OF CONNECTIONS RETAIL | NO. OF CONNECTIONS WHOLESALE |
|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 23.2 | 89.0 | 44,000 | 259,000 | 78,772 | 11 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 2,000 | | 39,000 | | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | 350.0 | N/A | 200,000 | 67,000 | N/A |
| ARLINGTON WATER UTILITIES | N/A | 98.0 | N/A | 250,000 | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | 617.6 | 0.0 | 819,700 | 878,440 | 137,323 | N/A |
| BOSTON WATER AND SEWER COMMISION | N/A | 46.0 | N/A | 571,000 | 87,400 | N/A |
| CHICAGO WATER DEPARTMENT | 368.0 | 228.0 | 1,534,000 | 3,005,000 | 491,300 | 300 |
| CLEVELAND, DIVISION OF WATER | N/A | 640.0 | 150,000 | 1,400,000 | 375,000 | 120 |
| DALLAS WATER UTILITIES | 386.0 | 333.0 | 667,000 | 960,850 | 258,149 | 34 |
| DES MOINES WATER WORKS | 594.0 | 78.0 | N/A | 198,000 | 67,873 | 27 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | N/A | 317.0 | N/A | 1,100,000 | 347,143 | N/A |
| ERIE COUNTY WATER AUTHORITY | 73.0 | 440.0 | 80,000 | 336,000 | 106,000 | 11 |
| FAIRFAX COUNTY WATER AUTHORITY | 300.0 | 250.0 | N/A | N/A | 175,776 | 4 |
| FORT WORTH WATER DEPT | 1600.0 | 1200.0 | 750,000 | 469,281 | 25 | 135,055 |
| HELIX WATER DISTRICT | 0.0 | 48.9 | 0 | 224,000 | 52,507 | 3 |
| HOUSTON PUBLIC WORKS | N/A | 557.0 | N/A | 2,000,000 | 384,000 | 102 |
| HUNTSVILLE UTILITIES WATER DEPT | 0.0 | 150.0 | 0 | 167,000 | 56,618 | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | 316.0 | 134,767 | 448,087 | 140,000 | 44 |
| KNOXVILLE UTILITIES BOARD | N/A | 186.0 | N/A | 200,000 | 60,594 | 5 |
| LAS VEGAS VALLEY WATER DISTRICT | 304.0 | 3561.0 | 600,000 | 504,000 | 130,342 | 12 |
| LONG BEACH WATER DEPARTMENT | 0.0 | 50.0 | 0 | 415,000 | 87,600 | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | N/A | 467.0 | N/A | 3,400,000 | 703,852 | N/A |
| LOUISVILLE WATER COMPANY | 100.0 | 320.0 | 6,000 | 191,317 | 223,839 | 7 |
| MANCHESTER WATER WORKS | N/A | 73.0 | N/A | 116,000 | 26,795 | 3 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 568.0 | N/A | 2,500,000 | N/A | N/A | 150 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 465.0 | 290.0 | 100,000 | 700,000 | 205,000 | 5 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 24.0 | 225.0 | 55,000 | 400,000 | 88,000 | 8 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 5200.0 | N/A | 14,500,000 | N/A | N/A | 337 |
| MILWAUKEE WATER WORKS | 55.0 | 96.0 | 208,000 | 636,000 | 160,039 | 6 |
| NEWPORT NEWS WATER WORKS | N/A | 250.0 | N/A | 347,950 | 96,653 | N/A |
| NORFOLK DEPT OF UTILTIES | N/A | N/A | 380,000 | 269,000 | 65,000 | 61 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | 136,000.0 | N/A | 143,000 | 40,886 | N/A |
| ORLANDO UTILITIES COMMISSION | 1.0 | 167.0 | 70 | 350,000 | 91,000 | 2 |
| PASSAIC VALLEY WATER COMMISSION | 103.0 | 24.0 | 375,000 | 275,146 | 60,640 | 23 |
| PORTLAND BUREAU OF WATER WORKS | 504.0 | 234.0 | 300,000 | 420,000 | 144,383 | 55 |
| RALEIGH DEPT OF PUBLIC UTILITIES | 0.0 | 86.5 | 0 | 212,000 | 65,000 | 4 |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | 100.0 | N/A | 249,000 | 82,858 | 3,125 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 15.0 | 43.0 | 8,000 | 125,000 | 38,000 | 4 |
| SEATTLE WATER DEPARTMENT | N/A | 93.0 | 540,000 | 597,000 | 170,000 | 125 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 15.0 | 250.0 | 20,000 | 386,520 | 95,640 | 4 |
| ST. LOUIS WATER DIVISION | 0.0 | 65.0 | 200,000 | 200,000 | 120,000 | 3 |
| TACOMA, WATER DIVISION | N/A | 59.1 | N/A | 213,500 | 75,801 | 11 |
| TAMPA WATER DEPT | N/A | 411.0 | N/A | 465,000 | 110,600 | N/A |
| TUCSON WATER DEPARTMENT | N/A | 285.0 | N/A | 554,000 | 150,000 | N/A |
| VIRGINIA BEACH | N/A | 250.0 | N/A | 337,153 | 100,498 | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | 400.0 | N/A | 1,000,000 | 172,400 | 4 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 50.0 | 200.0 | N/A | 500,000 | 140,000 | 12 |

TABLE FOUR

| ORGANIZATION NAME | VINTAGE OF SUPPLY & TRANSMISSION SYSTEM (%) | | | | | | | VINTAGE OF DISTRIBUTION SYSTEM (%) | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | PRE 1900 | 1900-24 | 1925-49 | 1950-59 | 1960-69 | 1970-79 | 1980- | PRE 1900 | 1900-24 | 1925-49 | 1950-59 | 1960-69 | 1970-79 | 1980- |
| AKRON PUBLIC UTILITIES BUREAU | 3.0% | 39.0% | 20.0% | 15.0% | 10.0% | 9.0% | 4.0% | 3.0% | 36.0% | 26.0% | 11.0% | 11.0% | 11.0% | 2.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | 0.5% | 1.0% | 2.0% | 14.8% | 18.3% | 28.2% | 35.2% | 0.5% | 1.0% | 2.0% | 14.8% | 18.3% | 28.2% | 35.2% |
| BOARD OF WATER SUPPLY HONOLULU | 0.0% | 2.0% | 29.0% | 14.0% | 16.0% | 20.0% | 19.0% | 0.0% | 2.0% | 23.0% | 15.0% | 24.0% | 19.0% | 17.0% |
| BOSTON WATER AND SEWER COMMISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 61.8% | 25.0% | 13.0% | 0.0% | 0.1% | 0.1% | 0.1% |
| CHICAGO WATER DEPARTMENT | 0.0% | 38.0% | 41.0% | 7.0% | 13.0% | 1.0% | 0.0% | 25.0% | 37.0% | 21.0% | 6.0% | 6.0% | 3.0% | 2.0% |
| CLEVELAND, DIVISION OF WATER | 15.0% | 20.0% | 30.0% | 10.0% | 5.0% | 5.0% | 15.0% | 20.0% | 30.0% | 20.0% | 9.0% | 8.0% | 7.0% | 6.0% |
| DALLAS WATER UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| DES MOINES WATER WORKS | 8.0% | 0.0% | 49.0% | 0.0% | 0.0% | 0.0% | 43.0% | 0.0% | 53.0% | 15.0% | 17.0% | 8.0% | 6.0% | 1.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ERIE COUNTY WATER AUTHORITY | 0.0% | 0.0% | 0.0% | 0.0% | 30.0% | 50.0% | 20.0% | 2.0% | 10.0% | 30.0% | 10.0% | 25.0% | 13.0% | 10.0% |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| FORT WORTH WATER DEPT | 5.0% | 10.0% | 30.0% | 0.0% | 30.0% | 5.0% | 20.0% | 5.0% | 10.0% | 15.0% | 30.0% | 15.0% | 15.0% | 10.0% |
| HELIX WATER DISTRICT | 0.0% | 0.0% | 30.0% | 60.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 10.0% | 35.0% | 25.0% | 20.0% | 10.0% |
| HOUSTON PUBLIC WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | 0.0% | 0.0% | 5.0% | 20.0% | 45.0% | 10.0% | 30.0% | 0.0% | 0.0% | 10.0% | 20.0% | 25.0% | 20.0% | 25.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 0.0% | 6.0% | 50.0% | 30.0% | 5.0% | 5.0% | 4.0% | 10.0% | 20.0% | 15.0% | 11.0% | 30.0% | 8.0% | 6.0% |
| KNOXVILLE UTILITIES BOARD | 1.0% | 3.0% | 20.0% | 20.0% | 30.0% | 24.0% | 2.0% | 1.0% | 3.0% | 20.0% | 25.0% | 30.0% | 15.0% | 6.0% |
| LAS VEGAS VALLEY WATER DISTRICT | 0.0% | 0.0% | 0.0% | 0.0% | 10.0% | 60.0% | 30.0% | 0.0% | 0.0% | 0.0% | 4.5% | 17.4% | 44.4% | 33.8% |
| LONG BEACH WATER DEPARTMENT | 0.0% | 6.0% | 39.0% | 15.0% | 13.0% | 19.0% | 8.0% | 0.0% | 0.0% | 63.0% | 27.0% | 8.0% | 0.0% | 2.0% |
| LOS ANGELES DEPT OF WATER AND POWER | 0.0% | 21.3% | 31.4% | 23.3% | 15.8% | 59.3% | 17.3% | 0.0% | 16.7% | 34.3% | 23.1% | 16.6% | 7.5% | 1.5% |
| LOUISVILLE WATER COMPANY | 10.0% | 5.0% | 20.0% | 10.0% | 45.0% | 5.0% | 5.0% | 12.0% | 5.0% | 15.0% | 5.0% | 50.0% | 10.0% | 3.0% |
| MANCHESTER WATER WORKS | 25.0% | 25.0% | 25.0% | 0.0% | 0.0% | 25.0% | 0.0% | 22.1% | 14.1% | 16.4% | 10.1% | 12.6% | 10.3% | 14.4% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 20.0% | 0.0% | 65.0% | 0.0% | 10.0% | 5.0% | 0.0% | 38.7% | 22.5% | 28.3% | 5.5% | 3.4% | 1.6% | 0.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 0.0% | 14.0% | 30.0% | 14.0% | 14.0% | 14.0% | 14.0% | 0.0% | 5.0% | 25.0% | 20.0% | 20.0% | 15.0% | 15.0% |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 4.0% | 27.0% | 36.0% | 8.0% | 15.0% | 8.0% | 2.0% | 12.0% | 15.0% | 25.0% | 19.0% | 25.0% | 1.0% | 13.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 0.0% | 0.0% | 40.0% | 10.0% | 30.0% | 10.0% | 10.0% | 0.0% | 0.0% | 40.0% | 10.0% | 30.0% | 10.0% | 10.0% |
| MILWAUKEE WATER WORKS | 0.0% | 43.0% | 0.0% | 0.0% | 57.0% | 0.0% | 0.0% | 15.0% | 12.0% | 24.0% | 21.0% | 16.0% | 6.0% | 6.0% |
| NEWPORT NEWS WATER WORKS | 0.0% | 11.6% | 17.4% | 8.7% | 29.0% | 33.3% | 0.0% | 2.5% | 0.0% | 12.5% | 30.0% | 15.0% | 15.0% | 25.0% |
| NORFOLK DEPT OF UTILTIES | 2.0% | 3.0% | 20.0% | 20.0% | 20.0% | 15.0% | 5.0% | 1.0% | 2.0% | 7.0% | 20.0% | 20.0% | 20.0% | 30.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0.0% | 0.0% | 0.0% | 0.0% | 25.0% | 25.0% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | 25.0% | 25.0% | 50.0% |
| ORLANDO UTILITIES COMMISSION | 0.0% | 0.0% | 0.0% | 15.0% | 25.0% | 35.0% | 25.0% | 1.0% | 2.0% | 2.0% | 5.0% | 40.0% | 30.0% | 20.0% |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 10.0% | 25.0% | 20.0% | 20.0% | 10.0% | 10.0% | 5.0% | 10.0% | 25.0% | 25.0% | 10.0% | 10.0% | 10.0% | 10.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 0.0% | 0.0% | 0.0% | 0.0% | 40.0% | 60.0% | 0.0% | 0.0% | 0.0% | 10.0% | 30.0% | 30.0% | 20.0% | 10.0% |
| SALT LAKE CITY PUBLIC UTILITIES | 15.0% | 0.0% | 30.0% | 25.0% | 0.0% | 0.0% | 30.0% | 0.0% | 15.0% | 15.0% | 10.0% | 20.0% | 30.0% | 10.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 10.0% | 5.0% | 5.0% | 20.0% | 20.0% | 20.0% | 20.0% | 10.0% | 5.0% | 5.0% | 20.0% | 20.0% | 20.0% | 20.0% |
| SEATTLE WATER DEPARTMENT | N/A | 51.6% | 1.9% | 17.6% | 27.1% | 1.5% | 0.3% | N/A | 45.3% | 24.4% | 15.7% | 7.1% | 2.1% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 5.0% | 10.0% | 60.0% | 10.0% | 10.0% | 4.0% | 1.0% | 6.0% | 13.0% | 24.0% | 16.0% | 15.0% | 13.0% | 13.0% |
| ST. LOUIS WATER DIVISION | 60.0% | 30.0% | 0.0% | 0.0% | 10.0% | 0.0% | 0.0% | 40.0% | 0.0% | 40.0% | 0.0% | 20.0% | 0.0% | 0.0% |
| TACOMA, WATER DIVISION | 0.0% | 7.0% | 65.0% | 13.0% | 3.0% | 10.0% | 2.0% | 0.0% | 2.0% | 31.0% | 20.0% | 13.0% | 25.0% | 9.0% |
| TAMPA WATER DEPT | 0.0% | 45.0% | 20.0% | 5.0% | 5.0% | 20.0% | 5.0% | 0.0% | 35.0% | 25.0% | 10.0% | 10.0% | 10.0% | 10.0% |
| TUCSON WATER DEPARTMENT | 0.0% | 5.0% | 15.0% | 10.0% | 25.0% | 25.0% | 20.0% | 0.0% | 5.0% | 15.0% | 10.0% | 25.0% | 25.0% | 20.0% |
| VIRGINIA BEACH | 0.0% | 0.0% | 0.0% | 10.0% | 10.0% | 50.0% | 30.0% | 0.0% | 0.0% | 0.0% | 10.0% | 20.0% | 40.0% | 30.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% | 1.0% | 23.0% | 22.0% | 16.0% | 20.0% | 18.0% |

TABLE FIVE

| ORGANIZATION NAME | WATERSHED: UTILITY OWN WATERSHED? | WATERSHED: CONTROL ACTIVITIES? | WATERSHED: TYPE OF ACTIVITY: INDUSTRIAL | COMMERCIAL | RESIDENTIAL | RECREATIONAL | QUALIFY FOR EPA EXEMP. FILTRATION? |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | Yes | Yes | Yes | Yes | Yes | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | No | No | No | No | Yes | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | No | N/A | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | No | No | Yes | Yes | Yes | Yes | No |
| BOARD OF WATER SUPPLY HONOLULU | Yes | No | No | No | Yes | Yes | No |
| BOSTON WATER AND SEWER COMMISION | No | No | N/A | N/A | N/A | N/A | N/A |
| CHICAGO WATER DEPARTMENT | No | No | Yes | Yes | Yes | Yes | No |
| CLEVELAND, DIVISION OF WATER | No | No | Yes | Yes | No | Yes | No |
| DALLAS WATER UTILITIES | No | No | Yes | Yes | Yes | Yes | No |
| DES MOINES WATER WORKS | No | No | Yes | Yes | Yes | Yes | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | Yes | No | No | No | Yes | No |
| ERIE COUNTY WATER AUTHORITY | No | N/A | N/A | N/A | N/A | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | No | No | No | Yes | Yes | Yes | No |
| FORT WORTH WATER DEPT | No | No | No | No | Yes | Yes | No |
| HELIX WATER DISTRICT | No | Yes | No | No | Yes | Yes | No |
| HOUSTON PUBLIC WORKS | No | No | Yes | Yes | Yes | Yes | No |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | Yes | Yes | Yes | Yes | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | No | No | Yes | Yes | Yes | Yes | No |
| KNOXVILLE UTILITIES BOARD | No | No | Yes | Yes | Yes | Yes | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | Yes | Yes | Yes | Yes | No |
| LONG BEACH WATER DEPARTMENT | No | No | No | No | Yes | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | No | No | No | No | No | Yes | No |
| LOUISVILLE WATER COMPANY | No | No | Yes | Yes | Yes | Yes | No |
| MANCHESTER WATER WORKS | YES1/3 | Yes | Yes | Yes | Yes | Yes | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | Yes | Yes | Yes | Yes | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | No | Yes | Yes | Yes | Yes | Yes |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | Yes | No | Yes | Yes | Yes | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | No | No | Yes | Yes | Yes | Yes | No |
| MILWAUKEE WATER WORKS | No | No | Yes | Yes | Yes | Yes | No |
| NEWPORT NEWS WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | N/A |
| NORFOLK DEPT OF UTILTIES | No | No | Yes | Yes | Yes | Yes | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | No | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | No | No | Yes | Yes | Yes | Yes | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | No | Yes | No | No | No | No | Yes |
| RALEIGH DEPT OF PUBLIC UTILITIES | NO | SOME | N/A | N/A | Yes | Yes | No |
| SALT LAKE CITY PUBLIC UTILITIES | No | Yes | No | Yes | Yes | Yes | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | No | No | Yes | Yes | Yes | Yes | No |
| SEATTLE WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | Yes | Yes | Yes | Yes | Yes | No |
| ST. LOUIS WATER DIVISION | No | No | Yes | Yes | Yes | Yes | No |
| TACOMA, WATER DIVISION | Yes | Yes | No | No | No | Yes | Yes |
| TAMPA WATER DEPT | No | No | Yes | Yes | Yes | Yes | No |
| TUCSON WATER DEPARTMENT | No | N/A | N/A | N/A | N/A | N/A | N/A |
| VIRGINIA BEACH | No | No | N/A | N/A | N/A | N/A | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | No | Yes | Yes | Yes | Yes | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | No | No | Yes | Yes | Yes | Yes | No |

TABLE SIX

| ORGANIZATION NAME | --AVG DAILY WATER SUPPLIED-- TOTAL (MGD) | WHOLESALE (MGD) | RETAIL (MGD) | SYSTEM DAILY SAFE YIELD (MGD) | PEAK DAILY DELIVERY (MGD) | PEAK DAILY DELIVERY CURRENT (MGD) | MAXIMUM CAPACITY (MGD) |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 32.33 | 3.83 | 28.50 | 57.00 | N/A | 74.00 | 100.00 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 26.00 | N/A | 26.00 | 45.00 | 35.00 | 35.00 | 45.00 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 29.06 | N/A | 29.06 | 56.00 | 56.00 | 53.00 | 56.00 |
| ARLINGTON WATER UTILITIES | 46.54 | N/A | 46.54 | 136.00 | 96.29 | 86.77 | 136.00 |
| BOARD OF WATER SUPPLY HONOLULU | 144.20 | N/A | 144.20 | 155.00 | 181.81 | 166.74 | 169.70 |
| BOSTON WATER AND SEWER COMMISION | 122.98 | N/A | N/A | N/A | N/A | N/A | 111.40 |
| CHICAGO WATER DEPARTMENT | 1,043.00 | 221.00 | 822.00 | 2,160.00 | 1,762.00 | 1,682.00 | 2,337.00 |
| CLEVELAND, DIVISION OF WATER | 320.00 | 32.00 | 288.00 | N/A | N/A | 477.00 | 645.00 |
| DALLAS WATER UTILITIES | 319.00 | 85.00 | 234.00 | 326.90 | 577.66 | 577.66 | 700.00 |
| DES MOINES WATER WORKS | 38.80 | 5.70 | 29.80 | 175.00 | 66,610.00 | 112.00 | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 205.00 | N/A | 205.00 | 215.00 | N/A | 237.00 | 325.00 |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | 100.00 | 35.00 | 65.00 | 160.00 | 160.00 | 160.00 | 160.00 |
| FORT WORTH WATER DEPT | 120.00 | 30.00 | 40.00 | 300.00 | N/A | 247.00 | 330.00 |
| HELIX WATER DISTRICT | 46.00 | 8.00 | 38.00 | 60.00 | 71.00 | 66.00 | 75.00 |
| HOUSTON PUBLIC WORKS | 515.70 | 282.30 | 233.40 | N/A | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | 27.00 | 0.00 | 27.00 | 40.00 | 54.00 | 0.00 | 63.00 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 106.00 | 17.00 | 89.00 | 240.00 | 192.00 | 240.00 | 300.00 |
| KNOXVILLE UTILITIES BOARD | 32.00 | 0.50 | 31.50 | 50.00 | 42.00 | 32.00 | 50.00 |
| LAS VEGAS VALLEY WATER DISTRICT | 149.40 | 153.40 | 149.40 | 347.00 | 272.00 | 272.00 | 347.00 |
| LONG BEACH WATER DEPARTMENT | 69.70 | N/A | 69.70 | 69.70 | 101.00 | 88.00 | 108.00 |
| LOS ANGELES DEPT OF WATER AND POWER | 613.00 | N/A | 613.00 | 1,010.00 | 923.00 | 841.50 | 1,010.00 |
| LOUISVILLE WATER COMPANY | 115.00 | 3.00 | 112.00 | 300.00 | 195.00 | 195.00 | 300.00 |
| MANCHESTER WATER WORKS | 15.55 | 1.50 | 14.05 | 20.50 | 40.00 | 27.00 | 30.00 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 307.00 | 307.00 | N/A | 300.00 | 468.00 | 468.00 | 600.00 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 135.00 | 20.00 | 115.00 | 200.00 | 380.00 | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 62.00 | 1.00 | 61.00 | 69.00 | 105.00 | 103.00 | 105.00 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 1,665.00 | 1,665.00 | N/A | N/A | 2,870.00 | N/A | 3,000.00 |
| MILWAUKEE WATER WORKS | 145.05 | 23.90 | 121.10 | 250.00 | 322.25 | 322.25 | 360.00 |
| NEWPORT NEWS WATER WORKS | 42.55 | N/A | 42.55 | 66.00 | 63.17 | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | 73.57 | 45.07 | 28.50 | 84.60 | N/A | 97.01 | 108.00 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 18.68 | N/A | N/A | 96.67 | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | 71.00 | 1.00 | 70.00 | 95.00 | 116.00 | 91.70 | 142.00 |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | 115.00 | 122.00 | 72.00 | 150.00 |
| PORTLAND BUREAU OF WATER WORKS | 125.00 | 35.60 | 89.40 | 225.00 | 254.00 | 254.00 | 350.00 |
| RALEIGH DEPT OF PUBLIC UTILITIES | 36.30 | 7.00 | 26.30 | 62.50 | 62.50 | 51.10 | 75.00 |
| SALT LAKE CITY PUBLIC UTILITIES | 89.00 | N/A | 89.00 | 244.00 | 212.00 | N/A | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 38.30 | 1.92 | 36.40 | 95.00 | 68.20 | 37.40 | 89.40 |
| SEATTLE WATER DEPARTMENT | 180.00 | 65.20 | 114.80 | 176.00 | N/A | 348.00 | 358.00 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 56.80 | 3.30 | 53.50 | 78.00 | 97.80 | 60.00 | 150.00 |
| ST. LOUIS WATER DIVISION | 160.00 | 8.00 | 152.00 | 360.00 | 230.00 | 130.00 | 460.00 |
| TACOMA, WATER DIVISION | 67.60 | 1.00 | 75.60 | 115.00 | 134.30 | N/A | 160.00 |
| TAMPA WATER DEPT | 71.70 | 0.20 | 71.50 | 100.00 | 98.00 | 76.70 | N/A |
| TUCSON WATER DEPARTMENT | 89.70 | N/A | 89.70 | 143.30 | 136.80 | 136.80 | N/A |
| VIRGINIA BEACH | 28.90 | N/A | 28.90 | N/A | 37.00 | 28.50 | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 100.00 | N/A | 100.00 | 177.00 | 154.00 | 100.00 | 180.00 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 95.00 | 5.00 | 90.00 | 140.00 | 168.00 | N/A | N/A |

TABLE SEVEN

| ORGANIZATION NAME | PER CAPITA AVG DAILY CONSUMPTION (GALL) | PEAK TO AVG DAY DESIGN FACTOR | PRINCIPAL WATER SOURCES RESERVOIRS (%) | GROUNDWATER (%) | LAKES/RIVERS (%) | PURCHASED (%) |
|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 107.00 | 1.50 | 100.0% | 0.0% | 0.0% | 0.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | 280.00 | N/A | 0.0% | 25.0% | 75.0% | 0.0% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | 1.60 | 0.0% | 79.0% | 0.0% | 21.0% |
| ARLINGTON WATER UTILITIES | 183.80 | 1.90 | 100.0% | 0.0% | 0.0% | 0.0% |
| BOARD OF WATER SUPPLY HONOLULU | 173.00 | 1.50 | 0.1% | 99.0% | 0.0% | 0.0% |
| BOSTON WATER AND SEWER COMMISION | 65.00 | 1.43 | 0.0% | 0.0% | 0.0% | 100.0% |
| CHICAGO WATER DEPARTMENT | 229.80 | 1.70 | 0.0% | 0.0% | 100.0% | 0.0% |
| CLEVELAND, DIVISION OF WATER | 170.00 | 2.00 | 0.0% | 0.0% | 100.0% | 0.0% |
| DALLAS WATER UTILITIES | 238.00 | 1.79 | 97.0% | 0.0% | 0.0% | 3.0% |
| DES MOINES WATER WORKS | 149.00 | 2.50 | 0.0% | 33.0% | 67.0% | 0.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 204.00 | N/A | 100.0% | 0.0% | 0.0% | 0.0% |
| ERIE COUNTY WATER AUTHORITY | N/A | 1.80 | 0.0% | 0.0% | 100.0% | 0.0% |
| FAIRFAX COUNTY WATER AUTHORITY | 100.00 | 1.60 | 38.0% | 1.0% | 60.0% | 1.0% |
| FORT WORTH WATER DEPT | 130.00 | 2.00 | 100.0% | 0.0% | 0.0% | 0.0% |
| HELIX WATER DISTRICT | 175.00 | 2.00 | 10.5% | 0.5% | 89.5% | 0.0% |
| HOUSTON PUBLIC WORKS | 117.00 | N/A | 0.0% | 55.0% | 45.0% | 0.0% |
| HUNTSVILLE UTILITIES WATER DEPT | 125.00 | 2.00 | 0.0% | 40.0% | 60.0% | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 182.00 | 1.60 | 0.0% | 10.0% | 90.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | 15.00 | 1.60 | 0.0% | 0.0% | 100.0% | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | 300.00 | 1.80 | 0.0% | 0.0% | 20.0% | 80.0% |
| LONG BEACH WATER DEPARTMENT | 163.00 | N/A | 0.0% | 40.0% | 0.0% | 40.0% |
| LOS ANGELES DEPT OF WATER AND POWER | 180.00 | 2.00 | 60.0% | 18.0% | 0.0% | 22.0% |
| LOUISVILLE WATER COMPANY | 166.00 | N/A | 0.0% | 0.0% | 100.0% | 0.0% |
| MANCHESTER WATER WORKS | 117.97 | 2.60 | 0.0% | 0.0% | 100.0% | 0.0% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 123.00 | 1.50 | 90.0% | 0.0% | 10.0% | 0.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 289.00 | 1.50 | 0.0% | 100.0% | 0.0% | 0.0% |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 135.00 | 1.60 | 100.0% | 0.0% | 0.0% | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | 100.0% | 0.0% | 0.0% | 0.0% |
| MILWAUKEE WATER WORKS | 127.60 | 1.50 | 0.0% | 0.0% | 100.0% | 0.0% |
| NEWPORT NEWS WATER WORKS | 125.00 | 1.30 | 100.0% | 0.0% | 0.0% | 0.0% |
| NORFOLK DEPT OF UTILTIES | 111.40 | 1.50 | 45.0% | 10.0% | 45.0% | 0.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 125.00 | 2.00 | 0.0% | 100.0% | 0.0% | 0.0% |
| ORLANDO UTILITIES COMMISSION | 204.00 | 1.70 | 0.0% | 100.0% | 0.0% | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | 117.00 | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 280.00 | 1.50 | 95.0% | 5.0% | 0.0% | 0.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 33.00 | 1.50 | 100.0% | 0.0% | 0.0% | 0.0% |
| SALT LAKE CITY PUBLIC UTILITIES | 243.00 | 2.20 | 0.0% | 18.0% | 42.0% | 40.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 284.30 | 1.82 | 0.0% | 92.4% | 2.7% | 4.9% |
| SEATTLE WATER DEPARTMENT | 128.00 | N/A | 96.0% | 4.0% | 0.0% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 140.00 | 2.00 | 80.0% | 20.0% | 0.0% | 0.0% |
| ST. LOUIS WATER DIVISION | 150.00 | N/A | 0.0% | 0.0% | 100.0% | 0.0% |
| TACOMA, WATER DIVISION | 220.00 | N/A | 0.0% | 11.0% | 89.0% | 0.0% |
| TAMPA WATER DEPT | 157.00 | 1.36 | 89.0% | 11.0% | 0.0% | 0.0% |
| TUCSON WATER DEPARTMENT | 160.00 | 2.00 | 0.0% | 100.0% | 0.0% | 0.0% |
| VIRGINIA BEACH | 87.00 | N/A | 0.0% | 0.0% | 0.0% | 100.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 151.00 | N/A | 0.0% | 0.0% | 100.0% | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 190.00 | N/A | 100.0% | 0.0% | 0.0% | 0.0% |

AMWA RATE SURVEY

TABLE EIGHT B. TREATMENT

| ORGANIZATION NAME | DISINFECTION | | | | | | VIRAL REMOVAL | | |
|---|---|---|---|---|---|---|---|---|---|
| | CHLORINE | CHL. DIOXIDE | OZONATION | CHLORAMINATION | COMBINATION | OTHER (DESCRIBE) | FILTRATION | OZONATION | OTHER (DESCRIBE) |
| AKRON PUBLIC UTILITIES BUREAU | Yes | Yes | No | No | No | No | RAPID SAND | No | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | No | No | No | No | No | Yes | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | Yes | No | No | No | No | No | No | No | No |
| ARLINGTON WATER UTILITIES | Yes | No | No | Yes | No | No | Yes | No | COAGULATION & SEDIMENT |
| BOARD OF WATER SUPPLY HONOLULU | Yes | No | No | No | No | No | SLOW SAND | No | No |
| BOSTON WATER AND SEWER COMMISION | No | No | No | Yes | No | No | No | No | No |
| CHICAGO WATER DEPARTMENT | Yes | No | No | No | No | No | Yes | No | No |
| CLEVELAND, DIVISION OF WATER | Yes | No | No | No | No | No | No | No | No |
| DALLAS WATER UTILITIES | No | No | No | Yes | No | No | Yes | No | DISINFECTION |
| DES MOINES WATER WORKS | Yes | No | No | No | No | No | RAPID SAND | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | No | No | Yes | Cl2,CHLORA. | No | DUAL MEDIA | No | No |
| ERIE COUNTY WATER AUTHORITY | Yes | No | No | No | No | No | Yes | No | CHLORINATION |
| FAIRFAX COUNTY WATER AUTHORITY | Yes | No | No | Yes | No | No | DUAL MEDIA | No | No |
| FORT WORTH WATER DEPT | Yes | No | No | Yes | Yes | No | MIXED MEDIA | No | No |
| HELIX WATER DISTRICT | No | No | No | Yes | No | No | DUAL MEDIA | No | No |
| HOUSTON PUBLIC WORKS | Yes | No | No | Yes | CL2, NH3 | No | DUAL MEDIA | No | No |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | No | No | No | No | No | Yes | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | No | No | Yes | No | No | Yes | No | LIME SOFTENING |
| KNOXVILLE UTILITIES BOARD | Yes | No | No | No | No | No | MIXED MEDIA | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | Yes | No | No | No | No | MIXED MEDIA | No | No |
| LONG BEACH WATER DEPARTMENT | Yes | No | No | Yes | No | No | Yes | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | No | Yes | Yes | No | No | HIGH RATE | Yes | CHLORINATION |
| LOUISVILLE WATER COMPANY | Yes | No | No | Yes | CHL.,CHLORA. | No | RAPID SAND | No | No |
| MANCHESTER WATER WORKS | Yes | No | No | No | No | No | SAND & GAC | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | No | Yes | No | No | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | Yes | No | No | No | No | No | No | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | No | No | No | No | No | SLOW SAND | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | No | No | YES | No | No | DUAL MEDIA | No | No |
| MILWAUKEE WATER WORKS | Yes | No | No | No | No | No | Yes | No | No |
| NEWPORT NEWS WATER WORKS | Yes | No | No | No | No | No | Yes | No | No |
| NORFOLK DEPT OF UTILTIES | Yes | YES | No | No | No | No | Yes | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION — | Yes | No | No | No | No | No | No | No | No |
| ORLANDO UTILITIES COMMISSION | Yes | No | No | No | No | No | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | Yes | No | No | No | No | No | Yes | No | COAG SED. |
| PORTLAND BUREAU OF WATER WORKS | No | No | No | Yes | No | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | No | No | No | No | No | MIXED MEDIA | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | No | No | No | No | No | RAPID SAND | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | No | No | No | No | No | MULTI-MEDIA | No | No |
| SEATTLE WATER DEPARTMENT | Yes | No | No | No | No | No | No | No | SHED PROTECT,DISINFECT |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | No | No | No | No | No | No | No | No |
| ST. LOUIS WATER DIVISION | No | No | No | Yes | No | No | Yes | No | SEDIMENTATION |
| TACOMA, WATER DIVISION | Yes | No | No | No | No | No | No | No | No |
| TAMPA WATER DEPT | Yes | No | No | Yes | No | No | No | No | No |
| TUCSON WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| VIRGINIA BEACH | THE CITY OF VIRGINIA BEACH DOES NOT TREAT WATER. | | | | | | | | |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | Yes | No | No | No | No | No | MULTI MEDIA | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | No | No | No | No | No | Yes | No | No |

TABLE NINE

| ORGANIZATION NAME | TOXIC WASTE REMOVAL: AIR STRIPPING | TOXIC WASTE REMOVAL: GAC | TOXIC WASTE REMOVAL: OTHER (DESCRIBE) | TURBIDITY REMOVAL: CHEM. TREAT. | TURBIDITY REMOVAL: FILTRATION | TURBIDITY REMOVAL: SEDIMENT | TURBIDITY REMOVAL: OTHER (DESCRIBE) | FLUORIDATION: FLUOS. ACID | FLUORIDATION: OTHER (DESCRIBE) |
|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | No | No | No | Yes | Yes | Yes | No | Yes | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | No | No | Yes | Yes | Yes | No | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | Yes | No | No | Yes | Yes | Yes | No | Yes | No |
| ARLINGTON WATER UTILITIES | No | No | No | Yes | Yes | Yes | No | Yes | No |
| BOARD OF WATER SUPPLY HONOLULU | No | Yes | No | No | Yes | No | No | No | No |
| BOSTON WATER AND SEWER COMMISION | No | No | No | No | No | No | No | Yes | No |
| CHICAGO WATER DEPARTMENT | No | No | No | Yes | Yes | Yes | No | Yes | No |
| CLEVELAND, DIVISION OF WATER | No | No | No | Yes | Yes | Yes | No | Yes | No |
| DALLAS WATER UTILITIES | N/A | N/A | N/A | Yes | Yes | Yes | No | Yes | No |
| DES MOINES WATER WORKS | No | No | No | Yes | Yes | Yes | No | Yes | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | No | No | No | Yes | Yes | Yes | No | Yes | No |
| ERIE COUNTY WATER AUTHORITY | No | No | No | Yes | Yes | Yes | No | Yes | No |
| FAIRFAX COUNTY WATER AUTHORITY | No | No | No | Yes | Yes | Yes | No | Yes | No |
| FORT WORTH WATER DEPT | No | No | No | Yes | Yes | Yes | No | Yes | No |
| HELIX WATER DISTRICT | No | No | No | Yes | Yes | Yes | No | No | No |
| HOUSTON PUBLIC WORKS | No | No | PAC & COAGULATION | Yes | Yes | Yes | No | Yes | No |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | FEED CARBON | Yes | Yes | Yes | No | Yes | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | No | No | PAC | Yes | Yes | Yes | LIME SOFTENING | Yes | No |
| KNOXVILLE UTILITIES BOARD | No | No | No | Yes | Yes | Yes | No | Yes | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | No | Yes | Yes | No | No | No | No |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | Yes | Yes | Yes | No | Yes | No |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | No | No | Yes | Yes | No | PREOZONATION | No | No |
| LOUISVILLE WATER COMPANY | No | No | No | Yes | Yes | Yes | No | Yes | No |
| MANCHESTER WATER WORKS | No | Yes | No | Yes | Yes | Yes | No | Yes | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | No | No | No | No | No | Yes | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | No | No | Yes | Yes | No | No | No | Yes |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | No | No | SOURCE PROTECTION | No | Yes | Yes | No | No | Yes |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | No | No | No | Yes | Yes | Yes | No | No | No |
| MILWAUKEE WATER WORKS | No | No | No | Yes | Yes | Yes | No | Yes | No |
| NEWPORT NEWS WATER WORKS | No | No | PAC | Yes | Yes | No | Yes | No | SODIUM SIL |
| NORFOLK DEPT OF UTILTIES | No | No | PAC | Yes | Yes | Yes | No | No | SODIUM SIL |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | No | No | No | No | No | No | No | No |
| ORLANDO UTILITIES COMMISSION | No | No | No | No | No | No | No | No | SODIUM SIL |
| PASSAIC VALLEY WATER COMMISSION | No | No | No | Yes | Yes | Yes | No | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | No | No | No | No | No | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | No | No | No | Yes | Yes | Yes | No | Yes | No |
| SALT LAKE CITY PUBLIC UTILITIES | No | No | No | Yes | Yes | Yes | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | Yes | No | Yes | Yes | Yes | No | No | No |
| SEATTLE WATER DEPARTMENT | No | No | WATERSHED PROTECT | No | No | No | WATERSHED CONTROL | Yes | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | No | No | No | Yes | Yes | No | Yes | No |
| ST. LOUIS WATER DIVISION | No | No | SEDIMENTATION | Yes | Yes | Yes | No | Yes | No |
| TACOMA, WATER DIVISION | Yes | No | No | No | No | No | No | No | No |
| TAMPA WATER DEPT | No | No | No | Yes | Yes | Yes | No | Yes | No |
| TUCSON WATER DEPARTMENT | Yes | No | No | No | No | No | No | No | No |
| VIRGINIA BEACH | THE CITY OF VIRGINIA BEACH DOES NOT TREAT WATER. | | | | | | | | |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | No | PAC | Yes | Yes | Yes | No | Yes | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | No | No | No | Yes | Yes | Yes | No | No | No |

TABLE TEN

| ORGANIZATION NAME | TASTE AND ODOR: CHLORINATION | OZONATION | CARBON | OTHER (DESCRIBE) | ALGAE REMOVAL: CHEMICAL TREATMENT | FILTRATION | MICRO STRAIN HARVESTING | OTHER (DESCRIBE) |
|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | No | Yes | No | COPPER SULFATE | Yes | No | Yes | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | No | No | No | Yes | Yes | No | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | No | No | AERATION | No | No | No | No | No |
| ARLINGTON WATER UTILITIES | Yes | No | PAC | LAKE DESTRATIF | COAGULATION & PAC | Yes | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | No | No | No | No | No | No | No | No | No |
| BOSTON WATER AND SEWER COMMISION | No | No | No | No | CUSO4 | No | No | No | No |
| CHICAGO WATER DEPARTMENT | No | No | PAC | No | ALUM | Yes | No | No | No |
| CLEVELAND, DIVISION OF WATER | No | No | PAC | No | No | Yes | No | No | No |
| DALLAS WATER UTILITIES | Yes | No | PAC | No | LIME,COAGULATION | No | No | No | No |
| DES MOINES WATER WORKS | No | No | PAC | POTASSIUM PERMANGA | OXIDATION | Yes | No | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | No | GAC & PAC | POTASSIUM PERMANGA | CuSo4 & CITRIC ACI | No | No | No | No |
| ERIE COUNTY WATER AUTHORITY | No | No | PAC | No | SEDIMENTATION | Yes | No | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | Yes | No | PAC | POTASSIUM PERMANGA | COPPER SULFATE | Yes | No | No | No |
| FORT WORTH WATER DEPT | Yes | No | PAC | POTASSIUM PERMANGA | No | Yes | No | No | No |
| HELIX WATER DISTRICT | Yes | No | Yes | No | No | Yes | No | No | No |
| HOUSTON PUBLIC WORKS | Yes | No | PAC | KmNO4 | Yes | Yes | No | No | No |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | No | Yes | No | Yes | No | No | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | No | PAC | COAGULATION | No | No | No | No | No |
| KNOXVILLE UTILITIES BOARD | Yes | No | No | POTASSIUM PERMANGA | No | Yes | No | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | No | PAC | SO2 | Cl2 | Yes | No | No | No |
| LONG BEACH WATER DEPARTMENT | No | No | No | No | No | No | No | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | No | No | COPPER SALT | Yes | No | No | CHLORINATION |
| LOUISVILLE WATER COMPANY | Yes | No | PAC | POTASSIUM PERMANGA | ALUM | Yes | No | No | CARBON BLACKOUT |
| MANCHESTER WATER WORKS | Yes | No | COAL BASE CARBON | No | Yes | Yes | No | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | No | No | COPPER SULFATE | No | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | No | No | AERATION | No | No | No | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | No | No | COPPER SULFATE | COPPER SULFATE | Yes | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | No | No | CuSo4.5H2O | COPPER SULFATE | Yes | No | No | No |
| MILWAUKEE WATER WORKS | No | No | PAC | KmNO4 | No | Yes | No | No | No |
| NEWPORT NEWS WATER WORKS | Yes | No | No | PAC | No | Yes | No | No | No |
| NORFOLK DEPT OF UTILTIES | Yes | No | PAC | No | COPPER SULFATE | No | No | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | Yes | No | No | No | No | No | No | No | No |
| ORLANDO UTILITIES COMMISSION | No | No | No | AERATION | No | No | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | Yes | No | PAC | No | COPPER SULFATE | Yes | No | No | No |
| PORTLAND BUREAU OF WATER WORKS | No | No | No | No | No | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | No | Yes | POTASSIUM PERMANGA | CHLORINE | No | No | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | No | No | No | COPPER SULFATE | Yes | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | No | No | No | No | Yes | No | No | No |
| SEATTLE WATER DEPARTMENT | No | No | No | No | CALCIUM HYPOCHLORIT | No | No | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | No | No | No | COPPER SULFATE | Yes | No | No | No |
| ST. LOUIS WATER DIVISION | No | No | Yes | No | ACTIVATED CARBON | Yes | No | No | SEDIMENTATION |
| TACOMA, WATER DIVISION | Yes | No | PAC | COPPER SULFATE | COPPER SULFATE | No | No | No | No |
| TAMPA WATER DEPT | Yes | No | PAC | POTASSIUM PERMANGA | COPPER SULFATE | Yes | No | Yes | No |
| TUCSON WATER DEPARTMENT | Yes | No | No | No | No | No | No | No | No |
| VIRGINIA BEACH | THE CITY OF VIRGINIA BEACH DOES NOT TREAT WATER. | | | | | | | | |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | Yes | No | PAC | No | No | No | No | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | No | PAC | KmNO4 | No | No | No | No | COAGUL & SEDIMENT |

TABLE ELEVEN

| | COLOR | | | CORROSION CONTROL | | | |
|---|---|---|---|---|---|---|---|
| ORGANIZATION NAME | CHEM. TREAT. | FILTRATION | OTHER (DESCRIBE) | pH ADJUSTMENT | ALKALINITY ADJ. | CORROSION INHIBITOR | OTHER (DESCRIBE) |
| AKRON PUBLIC UTILITIES BUREAU | Yes | Yes | No | CAUSTIC SODA | No | ZINC ORTHOPHOSPHATE | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | Yes | No | Yes | Yes | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | No | No | LIME | No | PHOSPHATE | No |
| ARLINGTON WATER UTILITIES | Yes | Yes | No | LIQUID SODIUM HYDROX | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | No | Yes | No | No | No | No | No |
| BOSTON WATER AND SEWER COMMISION | No | No | No | SODIUM HYDROXIDE | No | No | No |
| CHICAGO WATER DEPARTMENT | Yes | Yes | No | LIME & NaOH | No | No | No |
| CLEVELAND, DIVISION OF WATER | No | No | No | No | No | No | No |
| DALLAS WATER UTILITIES | Yes | No | No | Yes | Yes | HEXAMETAPHOSPHATE | No |
| DES MOINES WATER WORKS | No | Yes | No | LIME | CO2 | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | No | No | No | NaOH | No | No | No |
| ERIE COUNTY WATER AUTHORITY | No | No | No | No | No | Yes | Yes |
| FAIRFAX COUNTY WATER AUTHORITY | Yes | Yes | No | SODA & LIME | LIME | LOCAL ONLY | No |
| FORT WORTH WATER DEPT | No | Yes | No | SODIUM HYDROXIDE | No | No | No |
| HELIX WATER DISTRICT | Yes | Yes | No | LIME | LIME | LIME | No |
| HOUSTON PUBLIC WORKS | Yes | Yes | No | LIME, CAUSTIC | Yes | SODIUM HEXAMETAPOY | No |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | No | CA(OH)2 | CA(OH)2 | CA(OH)2 | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | No | PAC LIME SOFTENING | LIME SOFTENING-RECARB | Yes | Yes | No |
| KNOXVILLE UTILITIES BOARD | No | Yes | No | CAUSTIC SODA | No | POLYPHOSPHATE | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | No | No | No | Yes | No |
| LONG BEACH WATER DEPARTMENT | Yes | Yes | CL2 UPSTREAM FILTER | Yes | No | Yes | No |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | OZONATION | No | No | No | No |
| LOUISVILLE WATER COMPANY | Yes | Yes | POTASSIUM PERMANGAN | LIME | No | No | No |
| MANCHESTER WATER WORKS | Yes | Yes | No | CAUSTIC SODA | No | ZINC ORTHOPHOSPHATE | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | No | CAUSTIC SODA | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | No | No | No | No | Yes | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | Yes | No | Yes | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | No | No | No | CAUSTIC SODA | No | No | No |
| MILWAUKEE WATER WORKS | No | No | No | No | No | No | No |
| NEWPORT NEWS WATER WORKS | Yes | No | No | No | No | No | SODIUM HEXAMETAPHO |
| NORFOLK DEPT OF UTILTIES | Yes | Yes | No | Yes | No | META PHOSPHATE | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | No | No | No | No | No | No |
| ORLANDO UTILITIES COMMISSION | No | No | No | No | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | No | No | No | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | No | No | Yes | Yes | Yes | No |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | Yes | No | No | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | No | No | No | No | No | No | No |
| SEATTLE WATER DEPARTMENT | No | No | Yes | LIME | SODIUM CARBONATE | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | Yes | No | Yes | No | Yes | No |
| ST. LOUIS WATER DIVISION | Yes | No | SEDIMENTATION | Yes | Yes | No | No |
| TACOMA, WATER DIVISION | No | No | No | No | No | No | No |
| TAMPA WATER DEPT | Yes | Yes | No | Yes | Yes | Yes | No |
| TUCSON WATER DEPARTMENT | No | No | No | No | No | No | No |
| VIRGINIA BEACH | THE CITY OF VIRGINIA BEACH DOES NOT TREAT WATER. | | | | | | |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | Yes | No | LIME | LIME | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | No | No | ALUM | LIME | No | No | No |

TABLE TWELVE

| | COMPLIANCE WITH SAFE DRINKING WATER ACT | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ORGANIZATION NAME | DISINFECT REQ. COST (000'S) | | BY-PROD CONTROL COST (000'S) | | FILTRATION REQ. COST (000'S) | | LEAD/CORROSION COST (000'S) | | RADIONUCLIDES COST (000'S) | | VOLITILE CHEM REMOV. COST (000'S) | | PESTICIDE REMOV COST (000'S) | | SYNTH. CHEM. COST (000'S) | |
| AKRON PUBLIC UTILITIES BUREAU | MODIFY | N/A | ADD | N/A | MODIFY | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | ADD | N/A |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| ARLINGTON WATER UTILITIES | No | N/A | MODIFY | 4,000 | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| BOARD OF WATER SUPPLY HONOLULU | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| BOSTON WATER AND SEWER COMMISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CHICAGO WATER DEPARTMENT | No | N/A | No | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| CLEVELAND, DIVISION OF WATER | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| DALLAS WATER UTILITIES | ADD 60,000 | | | | MODIFY | 30,000 | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| DES MOINES WATER WORKS | No | N/A | ADD | N/A | No | N/A | No | N/A | No | N/A | No | N/A | ADD | N/A | No | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | ADD | 60,700 | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| ERIE COUNTY WATER AUTHORITY | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | MODIFY | 9,000 | ADD | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| FORT WORTH WATER DEPT | MODIFY | 10,000 | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| HELIX WATER DISTRICT | MODIFY | N/A | ADD | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| HOUSTON PUBLIC WORKS | N/A | N/A | No | N/A | MODIFY | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | ADD | N/A | No | N/A | No | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 8 | 500 | No | N/A | MODIFY | 1,000 | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| KNOXVILLE UTILITIES BOARD | No | N/A | MODIFY | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | MODIFY | 20 | MODIFY | N/A | No | N/A | ADD | 0.25 | No | N/A | No | N/A | No | N/A | No | N/A |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | ADD | 5,000 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| LOUISVILLE WATER COMPANY | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| MANCHESTER WATER WORKS | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | MODIFY | 7,500 | No | N/A | N/A | N/A | N/A | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | MODIFY | 300,000 (BOTH) | | | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| MILWAUKEE WATER WORKS | No | N/A | No | N/A | No | N/A | ADD | 500/YR. | No | N/A | No | N/A | No | N/A | No | N/A |
| NEWPORT NEWS WATER WORKS | MODIFY | 10,000 | MODIFY | 82,000 | No | N/A | MODIFY | 1,000 | No | N/A | No | N/A | No | N/A | No | N/A |
| NORFOLK DEPT OF UTILTIES | MODIFY | N/A | MODIFY | N/A | No | N/A | MODIFY | N/A | No | N/A | ADD | N/A | No | N/A | No | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | ADD | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | No | N/A | MODIFY | N/A | No | N/A | ADD | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | MODIFY | 5-15,000 | MODIFY | 45-55,000 | No | N/A | MODIFY | 1,000 | No | N/A | No | N/A | No | N/A | No | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | MODIFY | N/A | MODIFY | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | No | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | ADD | N/A | No | N/A | No | N/A |
| SEATTLE WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | No | N/A | MODIFY | N/A | No | N/A | MODIFY | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| ST. LOUIS WATER DIVISION | MODIFY | 100 | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| TACOMA, WATER DIVISION | MODIFY | 200 | No | N/A | No | N/A | MODIFY | 3-4,000 | No | N/A | No | N/A | No | N/A | No | N/A |
| TAMPA WATER DEPT | MODIFY | N/A | MODIFY | N/A | No | N/A | MODIFY | 50 | No | N/A | No | N/A | No | N/A | No | N/A |
| TUCSON WATER DEPARTMENT | ADD | N/A | ADD | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| VIRGINIA BEACH | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A | No | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | ADD | 12 | ADD | 54 | ADD | 9 | ADD | 1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

TABLE THIRTEEN

| | CURRENT SYSTEM WORKFORCE | | C. WORKFORCE | | | |
|---|---|---|---|---|---|---|
| | | | CONTRACTED WORK | | | |
| ORGANIZATION NAME | HEADCOUNT | ADMIN. INCLUDED ? | ENGINEERING | CONSTRUCTION | MAINT. | OTHER |
| AKRON PUBLIC UTILITIES BUREAU | 297 | No | 12.0% | 78.0% | 8.0% | 2.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | 34 | 2 | 0.0% | 0.0% | 0.0% | 0.0% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 94 | No | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | 229 | No | 40.0% | 45.0% | 15.0% | 0.0% |
| BOARD OF WATER SUPPLY HONOLULU | 632 | No | 75.0% | 99.0% | 25.0% | 0.0% |
| BOSTON WATER AND SEWER COMMISION | 553 | No | 0.0% | 100.0% | 0.0% | 0.0% |
| CHICAGO WATER DEPARTMENT | 2329 | No | 50.0% | 50.0% | 10.0% | 0.0% |
| CLEVELAND, DIVISION OF WATER | 1042 | No | 10.0% | 80.0% | 10.0% | 0.0% |
| DALLAS WATER UTILITIES | 1,942 | No | 30.0% | 90.0% | 1.0% | 0.0% |
| DES MOINES WATER WORKS | 205 | No | 25.0% | 75.0% | 0.0% | 0.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 1491 | No | 11.0% | 78.0% | 1.0% | 10.0% |
| ERIE COUNTY WATER AUTHORITY | 236 | No | 80.0% | 10.0% | 10.0% | 0.0% |
| FAIRFAX COUNTY WATER AUTHORITY | 375 | No | 60.0% | 30.0% | 10.0% | 0.0% |
| FORT WORTH WATER DEPT | 456 | No | 48.0% | 48.0% | 4.0% | 0.0% |
| HELIX WATER DISTRICT | 133 | No | 15.0% | 80.0% | 0.0% | 5.0% |
| HOUSTON PUBLIC WORKS | 1905 | No | 6.0% | 87.0% | 7.0% | 0.0% |
| HUNTSVILLE UTILITIES WATER DEPT | 224 | 153 | 10.0% | 70.0% | 5.0% | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 551 | No | 5.0% | 90.0% | 5.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | 260 | No | 0.0% | 100.0% | 0.0% | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | 424 | No | 60.0% | 98.0% | 5.0% | 0.0% |
| LONG BEACH WATER DEPARTMENT | 177 | No | 15.0% | 30.0% | 10.0% | 0.0% |
| LOS ANGELES DEPT OF WATER AND POWER | 3544 | 1,896 | 0.0% | 0.0% | 0.0% | 0.0% |
| LOUISVILLE WATER COMPANY | 443 | No | 5.0% | 90.0% | 5.0% | 0.0% |
| MANCHESTER WATER WORKS | 113 | No | 25.0% | 70.0% | 5.0% | 0.0% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 439 | No | 90.0% | 95.0% | 10.0% | 0.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 2,900 | No | 10.0% | 70.0% | 10.0% | 10.0% |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 730 | No | 20.0% | 65.0% | 5.0% | 10.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 1660 | No | 0.0% | 30.0% | 70.0% | 0.0% |
| MILWAUKEE WATER WORKS | 454 | No | 0.0% | 90.0% | 10.0% | 0.0% |
| NEWPORT NEWS WATER WORKS | 361 | No | N/A | N/A | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | 280 | No | 80.0% | 90.0% | 10.0% | 0.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 100 | No | 90.0% | 100.0% | 0.0% | 0.0% |
| ORLANDO UTILITIES COMMISSION | 121 | No | 25.0% | 70.0% | 5.0% | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | 10.0% | 10.0% | 0.0% | 0.0% |
| PORTLAND BUREAU OF WATER WORKS | 430 | No | 10.0% | 70.0% | 20.0% | 0.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 258 | No | 85.0% | 70.0% | 0.0% | 0.0% |
| SALT LAKE CITY PUBLIC UTILITIES | 247 | No | 10.0% | 90.0% | 0.0% | 0.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 147 | No | 64.0% | 14.0% | 8.0% | 0.0% |
| SEATTLE WATER DEPARTMENT | 486 | No | 50.0% | 95.0% | 10.0% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 329 | No | N/A | N/A | N/A | N/A |
| ST. LOUIS WATER DIVISION | 415 | No | 10.0% | 90.0% | 0.0% | 0.0% |
| TACOMA, WATER DIVISION | 159 | No | 10.0% | 25.0% | 10.0% | 0.0% |
| TAMPA WATER DEPT | 262 | No | 80.0% | 98.0% | 15.0% | 50.0% |
| TUCSON WATER DEPARTMENT | 483 | No | 80.0% | 90.0% | 10.0% | 0.0% |
| VIRGINIA BEACH | 358 | No | 49.0% | 49.0% | 2.0% | 0.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 369 | No | 30.0% | 80.0% | 5.0% | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 763 | 211 | 50.0% | 95.0% | 25.0% | 0.0% |

TABLE THIRTEEN A

| ORGANIZATION NAME | LEAD SERVICE CONNECT. | REMOVAL PROGRAM | REMOVAL COST/ CONNECT. | PROGRAM COST | YEARS TO COMPLETE |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 17,215 | Yes | 592 | 16,485,135 | 17 |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | No | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 20,000 | Yes | 1,000 | 20,000,000 | 15 |
| ARLINGTON WATER UTILITIES | No | No | N/A | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | No | N/A | N/A | N/A | N/A |
| BOSTON WATER AND SEWER COMMISION | N/A | Yes | N/A | N/A | N/A |
| CHICAGO WATER DEPARTMENT | 475,000 | No | N/A | N/A | N/A |
| CLEVELAND, DIVISION OF WATER | 100,000 | No | 1,500 | N/A | N/A |
| DALLAS WATER UTILITIES | 20,000 | Yes | 400 | 8,000,000 | 5-10 |
| DES MOINES WATER WORKS | N/A | No | N/A | N/A | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 1,250 | No | 500-750 | N/A | N/A |
| ERIE COUNTY WATER AUTHORITY | N/A | Yes | 500 | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | 150 | Yes | 1,000 | 150,000 | 3-5 |
| FORT WORTH WATER DEPT | 30,000 | Yes | 900 | 30,000,000 | 15 |
| HELIX WATER DISTRICT | No | N/A | N/A | N/A | N/A |
| HOUSTON PUBLIC WORKS | No | No | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | N/A | N/A | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 100 | Yes | N/A | N/A | 2 |
| KNOXVILLE UTILITIES BOARD | N/A | No | N/A | N/A | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | N/A | N/A | N/A |
| LONG BEACH WATER DEPARTMENT | N/A | Yes | 600 | N/A | 11 |
| LOS ANGELES DEPT OF WATER AND POWER | 10,000 | Yes | 1,000 | 10,000,000 | 5 |
| LOUISVILLE WATER COMPANY | 37,015 | Yes | 1,200 | 44,000,000 | 25 |
| MANCHESTER WATER WORKS | 25-50 | Yes | 1,000 | 50,000 | 3-5 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 30,000 | No | 100 | 30,000,000 | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | No | No | N/A | N/A | N/A |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | No | No | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | 32,000 | No | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | 11,954 | Yes | 265 | N/A | 10 |
| NORFOLK DEPT OF UTILTIES | 0 | Yes | 500 | N/A | 0 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | No | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | N/A | No | N/A | N/A | N/A |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 7,000 | Yes | 462 | 3,250,000 | 7 |
| RALEIGH DEPT OF PUBLIC UTILITIES | No | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | No | N/A | N/A | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | Yes | N/A | N/A | N/A |
| SEATTLE WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 14,500 | Yes | 1,400 | 20,300,000 | 15 |
| ST. LOUIS WATER DIVISION | N/A | No | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | 10,000 | Yes | 500 | 5,000,000 | 10-15 |
| TAMPA WATER DEPT | 1,000 | Yes | 350 | 350,000 | 3 |
| TUCSON WATER DEPARTMENT | 600 | Yes | 500 | 300,000 | 3 |
| VIRGINIA BEACH | N/A | N/A | N/A | N/A | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | Yes | N/A | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 200 | Yes | 435 | 87,000 | 2 |

TABLE FOURTEEN

COMPOSITION OF WORKFORCE

| ORGANIZATION NAME | WATER SUPPLY | WATER QUALITY | PLANT OPERATIONS | MAINTENANCE | ENGINEERING | FINANCE | CUSTOMER SERVICE | ADMIN. | CONSTRUCT. | OTHER (DESCRIBE) |
|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 10.0% | 1.0% | 11.0% | 49.0% | 11.0% | 3.0% | 14.0% | 1.0% | 0.0% | |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 0.0% | 0.0% | 38.0% | 55.0% | 0.0% | 0.0% | 7.0% | 0.0% | 0.0% | |
| ARLINGTON WATER UTILITIES | 0.0% | 5.2% | 18.3% | 22.3% | 3.5% | 0.0% | 9.2% | 4.3% | 3.5% | METER,PROP.MGMT,STORES |
| BOARD OF WATER SUPPLY HONOLULU | 3.7% | 2.2% | 11.4% | 32.6% | 7.0% | 10.6% | 9.1% | 5.0% | 3.5% | AUTO,EDP,BLDG MAINT |
| BOSTON WATER AND SEWER COMMISION | 53.0% | 0.0% | 0.0% | 0.0% | 11.0% | 5.6% | 15.7% | 5.2% | 4.3% | LEGAL,PLANNING,EXECUTIVE |
| CHICAGO WATER DEPARTMENT | 1.0% | 2.0% | 16.0% | 33.0% | 3.0% | 1.0% | 2.0% | 5.0% | 8.0% | PLUMBING,BILLING,REPAIR |
| CLEVELAND, DIVISION OF WATER | 0.0% | 0.0% | 23.0% | 44.0% | 5.0% | 0.0% | 20.0% | 8.0% | 0.0% | |
| DALLAS WATER UTILITIES | 1.0% | 2.0% | 3.0% | 20.0% | 11.0% | 18.0% | 3.0% | 4.0% | 10.0% | WASTEWATER OPERATIONS |
| DES MOINES WATER WORKS | 0.0% | 3.0% | 5.0% | 18.0% | 9.0% | 3.0% | 5.0% | 2.0% | 18.0% | EDP,ACCTG,PRODUCTION,DIS |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 7.3% | 3.8% | 3.0% | 25.2% | 11.2% | 2.8% | 8.0% | 8.7% | 10.7% | LEGAL,PROP,PERSONNEL |
| ERIE COUNTY WATER AUTHORITY | 8.3% | 10.0% | 7.4% | 40.0% | 8.3% | 4.3% | 8.3% | 11.3% | 2.1% | |
| FAIRFAX COUNTY WATER AUTHORITY | 0.0% | 0.0% | 47.0% | 0.0% | 8.0% | 29.0% | 0.0% | 5.0% | 0.0% | MANAGEMENT |
| FORT WORTH WATER DEPT | 2.0% | 2.0% | 15.0% | 5.0% | 10.0% | 0.0% | 11.0% | 4.0% | 44.0% | RESEARCH, STORES |
| HELIX WATER DISTRICT | 0.0% | 11.0% | 0.0% | 52.0% | 12.0% | 4.0% | 13.0% | 3.0% | 0.0% | SAFETY,PUBLIC EDUCATION |
| HOUSTON PUBLIC WORKS | 0.0% | 4.0% | 5.0% | 57.0% | 0.0% | 0.0% | 26.0% | 8.0% | 0.0% | |
| HUNTSVILLE UTILITIES WATER DEPT | 0.0% | 3.7% | 2.2% | 18.7% | 4.0% | 12.5% | 40.6% | 16.1% | 2.7% | |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 2.0% | 4.0% | 34.0% | 6.0% | 7.0% | 30.0% | 1.0% | 4.0% | 4.0% | |
| KNOXVILLE UTILITIES BOARD | 0.0% | 3.0% | 3.0% | 41.0% | 5.0% | 3.0% | 16.0% | 2.0% | 15.0% | SUPPORT FUNCTONS |
| LAS VEGAS VALLEY WATER DISTRICT | 0.0% | 4.0% | 10.0% | 27.0% | 8.0% | 6.0% | 6.0% | 14.0% | 5.0% | METERS,CONSERV,STORES |
| LONG BEACH WATER DEPARTMENT | 9.0% | 2.0% | 4.0% | 24.0% | 12.0% | 4.0% | 0.0% | 6.0% | 33.0% | WASTEWATER |
| LOS ANGELES DEPT OF WATER AND POWER | 8.0% | 3.0% | 29.0% | 0.0% | 5.0% | 0.0% | 0.0% | 1.0% | 0.0% | GENERAL SERVICES |
| LOUISVILLE WATER COMPANY | 0.0% | 2.0% | 7.0% | 45.0% | 18.0% | 8.0% | 18.0% | 2.0% | 0.0% | |
| MANCHESTER WATER WORKS | 12.4% | 2.2% | 13.2% | 17.7% | 5.3% | 22.1% | 10.6% | 2.2% | 14.3% | |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 23.7% | 6.0% | 0.0% | 45.8% | 8.0% | 0.0% | 0.0% | 10.7% | 6.0% | |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 0.7% | 0.3% | 0.6% | 2.5% | 0.3% | 0.2% | 0.7% | 8.2% | 1.5% | ELECTRIC & GAS SYSTEM |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 6.5% | 1.0% | 19.0% | 16.5% | 13.7% | 4.8% | 4.8% | 4.5% | 9.0% | AUTO,PERSONNEL,RESOURCE |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 0.0% | 5.0% | 54.0% | 1.0% | 15.0% | 4.0% | 2.0% | 15.0% | 4.0% | PLANNING & RESOURCES |
| MILWAUKEE WATER WORKS | 2.9% | 3.5% | 13.4% | 40.8% | 8.4% | 5.1% | 5.9% | 1.3% | 0.0% | METER READING,STORES |
| NEWPORT NEWS WATER WORKS | 0.0% | 6.0% | 23.0% | 0.0% | 7.0% | 5.0% | 16.0% | 1.0% | 0.0% | METER,PLANNING,DISTR. |
| NORFOLK DEPT OF UTILTIES | 5.0% | 5.0% | 20.0% | 30.0% | 15.0% | 10.0% | 10.0% | 5.0% | 0.0% | |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0.0% | 0.0% | 50.0% | 50.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | |
| ORLANDO UTILITIES COMMISSION | 0.0% | 0.0% | 23.0% | 33.0% | 11.0% | 0.0% | 3.0% | 45.0% | 30.0% | |
| PASSAIC VALLEY WATER COMMISSION | 6.0% | 11.0% | 12.0% | 21.0% | 2.0% | 1.0% | 15.0% | 4.0% | 30.0% | |
| PORTLAND BUREAU OF WATER WORKS | 5.0% | 3.0% | 2.0% | 7.0% | 13.0% | 5.0% | 9.0% | 3.0% | 48.0% | SUPPORT STAFF,EDP |
| RALEIGH DEPT OF PUBLIC UTILITIES | 2.0% | 7.0% | 20.0% | 38.0% | 1.0% | 1.0% | 1.0% | 8.0% | 23.0% | |
| SALT LAKE CITY PUBLIC UTILITIES | 4.0% | 1.0% | 14.0% | 48.0% | 8.0% | 7.0% | 13.0% | 2.0% | 2.0% | POWER,PUMPING |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 0.0% | 1.0% | 7.0% | 11.0% | 3.0% | 7.0% | 19.0% | 7.0% | 23.0% | WASTEWATER OPERATIONS |
| SEATTLE WATER DEPARTMENT | 4.0% | 7.0% | 0.0% | 0.0% | 15.0% | 5.0% | 20.0% | 6.0% | 0.0% | WATERSHED MANAGEMENT |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 12.0% | 11.0% | 20.0% | 20.0% | 5.0% | 5.0% | 8.0% | 10.0% | 9.0% | |
| ST. LOUIS WATER DIVISION | 0.0% | 4.0% | 20.0% | 50.0% | 4.0% | 4.0% | 16.0% | 2.0% | 0.0% | |
| TACOMA, WATER DIVISION | 31.0% | 8.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 0.0% | DISTRIBUTION |
| TAMPA WATER DEPT | 0.0% | 4.6% | 16.9% | 44.4% | 9.2% | 1.9% | 1.9% | 5.7% | 13.0% | STORES |
| TUCSON WATER DEPARTMENT | 7.7% | 2.9% | 6.6% | 34.6% | 16.4% | 1.4% | 24.0% | 3.5% | 2.9% | |
| VIRGINIA BEACH | 0.0% | 0.5% | 0.0% | 18.5% | 19.0% | 2.0% | 27.0% | 3.0% | 0.0% | WASTEWATER COLLECTION |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 4.4% | 1.1% | 16.5% | 29.5% | 4.9% | 1.9% | 18.6% | 12.4% | 5.7% | EDP,WASTEWATER |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 7.0% | 0.0% | 8.0% | 24.0% | 9.0% | 1.0% | 12.0% | 3.0% | 0.0% | EDP,SUPPORT STAFF,WASTEW |

# III. CUSTOMER DATA

TABLE FIFTEEN III. CUSTOMER DATA

| ORGANIZATION NAME | CUSTOMER WATER USAGE: WHOLESALE (%) | RESIDENTIAL (%) | COMMERCIAL (%) | INDUSTRIAL (%) | INSTITUTIONAL (%) | OTHER (%) |
|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 12.3% | 46.0% | 13.3% | 19.3% | 2.1% | 7.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | N/A | N/A | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 0.0% | 53.0% | 16.0% | 8.0% | 0.0% | 23.0% |
| ARLINGTON WATER UTILITIES | 0.0% | 52.8% | 46.9% | 0.0% | 0.0% | 0.3% |
| BOARD OF WATER SUPPLY HONOLULU | 0.0% | 60.5% | 22.0% | 4.4% | 11.6% | 1.5% |
| BOSTON WATER AND SEWER COMMISION | 0.0% | 20.0% | 17.0% | 29.0% | 34.0% | 0.0% |
| CHICAGO WATER DEPARTMENT | 30.0% | 42.0% | 16.0% | 7.0% | 5.0% | 0.0% |
| CLEVELAND, DIVISION OF WATER | 10.0% | 45.0% | 45.0% | 0.0% | 0.0% | 0.0% |
| DALLAS WATER UTILITIES | 26.0% | 48.0% | 20.0% | 6.0% | 0.0% | 0.0% |
| DES MOINES WATER WORKS | 20.0% | 35.0% | 35.0% | 10.0% | 0.0% | 0.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 1.0% | 60.0% | 17.0% | 14.0% | 0.0% | 8.0% |
| ERIE COUNTY WATER AUTHORITY | 13.9% | 64.2% | 11.4% | 6.6% | 3.8% | 0.1% |
| FAIRFAX COUNTY WATER AUTHORITY | 37.0% | 52.0% | 9.0% | 0.0% | 2.0% | 0.0% |
| FORT WORTH WATER DEPT | 24.0% | 35.0% | 26.0% | 12.0% | 0.0% | 3.0% |
| HELIX WATER DISTRICT | 16.8% | 68.4% | 11.2% | 2.6% | N/A | 1.0% |
| HOUSTON PUBLIC WORKS | 12.0% | 55.0% | 32.0% | 0.0% | 0.0% | 1.0% |
| HUNTSVILLE UTILITIES WATER DEPT | 0.0% | 49.0% | 40.0% | 11.0% | 0.0% | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 16.0% | 36.0% | 38.0% | 0.0% | 0.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | 1.0% | 43.0% | 26.0% | 30.0% | 0.0% | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | 66.0% | 21.0% | 1.0% | 6.0% | 6.0% |
| LONG BEACH WATER DEPARTMENT | 0.0% | 52.0% | 0.0% | 48.0% | 0.0% | 0.0% |
| LOS ANGELES DEPT OF WATER AND POWER | N/A | 37.0% | 51.0% | 5.0% | 0.0% | 7.0% |
| LOUISVILLE WATER COMPANY | 3.0% | 42.0% | 31.0% | 20.0% | 4.0% | 0.0% |
| MANCHESTER WATER WORKS | 10.0% | 80.0% | 5.0% | 3.0% | 1.0% | 1.0% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 0.9% | 52.7% | 20.3% | 19.3% | 6.8% | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| MILWAUKEE WATER WORKS | 16.5% | 31.4% | 21.1% | 26.8% | 4.2% | 0.0% |
| NEWPORT NEWS WATER WORKS | 0.0% | 53.0% | 12.0% | 27.0% | 8.0% | 0.0% |
| NORFOLK DEPT OF UTILTIES | 60.0% | 30.0% | 5.0% | 5.0% | N/A | 0.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0.0% | 75.0% | 25.0% | 0.0% | 0.0% | 0.0% |
| ORLANDO UTILITIES COMMISSION | 0.0% | 51.7% | 28.8% | 8.5% | 0.0% | 11.0% |
| PASSAIC VALLEY WATER COMMISSION | 32.0% | 24.0% | 9.0% | 19.0% | 3.0% | 15.0% |
| PORTLAND BUREAU OF WATER WORKS | 37.0% | 35.0% | 28.0% | 0.0% | 0.0% | 0.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 25.0% | 75.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| SALT LAKE CITY PUBLIC UTILITIES | 1.0% | 61.0% | 20.0% | 4.0% | 9.0% | 5.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 1.0% | 62.0% | 22.0% | 2.0% | N/A | 13.0% |
| SEATTLE WATER DEPARTMENT | 43.0% | 23.0% | 0.0% | 34.0% | 0.0% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 6.8% | 58.7% | 17.1% | 11.6% | 5.7% | 0.1% |
| ST. LOUIS WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | 1.4% | 32.7% | 20.5% | 41.9% | 3.5% | 0.0% |
| TAMPA WATER DEPT | 0.0% | 54.9% | 34.2% | 3.9% | 2.5% | 4.7% |
| TUCSON WATER DEPARTMENT | 0.0% | 73.0% | 24.0% | 1.0% | 0.0% | 2.0% |
| VIRGINIA BEACH | 0.0% | 75.0% | 12.0% | 8.0% | 3.0% | 2.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 3.0% | 87.5% | 7.5% | 1.0% | 1.0% | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 5.6% | 46.6% | 19.6% | 21.2% | 0.0% | 7.0% |

TABLE SIXTEEN

CUSTOMER BREAKDOWN/COUNT

| ORGANIZATION NAME | WHOLESALE | RESIDENTIAL SINGLE FAMILY (%) | RESIDENTIAL MULTI-FAMILY (%) | COMMERCIAL SMALL (%) | COMMERCIAL MED./LARGE (%) | INDUSTRIAL SMALL (%) | INDUSTRIAL MED./LARGE (%) | INSTITUTIONAL (%) | NON-PROFIT (%) | PUBLIC (%) | UNACCOUNTED WATER (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 5.4% | 89.0% | N/A | N/A | 4.8% | N/A | 0.8% | N/A | N/A | N/A | N/A |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | 0.0% | 88.0% | 5.0% | 5.0% | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% |
| BOSTON WATER AND SEWER COMMISION | 0.0% | 36.5% | 54.3% | 7.2% | 0.0% | 0.8% | 0.0% | 1.7% | 0.0% | 0.0% | 0.0% |
| CHICAGO WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| CLEVELAND, DIVISION OF WATER | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| DALLAS WATER UTILITIES | < 1.0% | 86.0% | 3.0% | \|-----10%-----\| | | \|------< 1%-----\| | | 0.0% | 0.0% | < 1.0% | 0.0% |
| DES MOINES WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 0.0% | 84.0% | 8.0% | 5.0% | 2.0% | 0.6% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | 0.0% | 71.0% | 25.0% | 3.0% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% |
| FORT WORTH WATER DEPT | 0.0% | 88.0% | 0.0% | 10.0% | 0.0% | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| HELIX WATER DISTRICT | 0.0% | 84.3% | 8.1% | 6.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.6% | 0.0% |
| HOUSTON PUBLIC WORKS | 10.0% | 25.0% | 22.0% | 28.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 15.0% |
| HUNTSVILLE UTILITIES WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 17.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 0.2% | 90.2% | 0.0% | 0.0% | 9.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | 0.0% | 95.7% | 0.0% | 1.6% | 2.2% | 0.3% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | 88.0% | 5.6% | 0.5% | 3.8% | 0.1% | 0.0% | 0.2% | 0.0% | 1.0% | 0.9% |
| LONG BEACH WATER DEPARTMENT | 0.0% | 70.0% | 10.0% | 15.0% | 5.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| LOS ANGELES DEPT OF WATER AND POWER | N/A | 72.0% | 17.0% | 9.0% | 0.0% | 1.0% | 0.0% | 0.0% | 0.0% | 1.0% | 0.0% |
| LOUISVILLE WATER COMPANY | 2.0% | 37.0% | 0.0% | 26.0% | 0.0% | 17.0% | 0.0% | 0.0% | 0.0% | 3.0% | 15.0% |
| MANCHESTER WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 15.0% | 60.0% | 0.0% | 10.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 14.0% |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 1.0% | 93.2% | 0.0% | 4.9% | 0.0% | 0.7% | 0.0% | 1.1% | 0.0% | 0.0% | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 100.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| MILWAUKEE WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | 0.0% | 92.0% | 0.0% | 6.4% | 0.0% | 0.0% | 10.0% | 0.0% | 0.0% | 1.1% | 0.0% |
| NORFOLK DEPT OF UTILTIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | 0.0% | 80.4% | 4.5% | 10.1% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | 32.0% | 11.0% | 15.0% | 9.0% | 19.0% | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 0.1% | 85.2% | 3.8% | 8.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| SEATTLE WATER DEPARTMENT | 0.1% | 43.6% | 0.0% | 56.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 5.7% | 49.7% | 0.0% | 15.3% | 0.0% | 9.8% | 0.0% | 1.0% | 0.0% | 4.9% | 14.5% |
| ST. LOUIS WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | 0.0% | 87.2% | 6.3% | 5.2% | 0.0% | 0.0% | 0.0% | 0.0% | 1.3% | 0.0% | 0.0% |
| TAMPA WATER DEPT | 0.0% | 84.1% | 3.1% | 8.8% | 3.0% | 0.2% | 0.1% | 0.2% | 0.3% | 0.2% | 0.0% |
| TUCSON WATER DEPARTMENT | 0.0% | 47.0% | 20.0% | 3.0% | 19.0% | 0.0% | 1.0% | 2.0% | 0.0% | 0.0% | 8.0% |
| VIRGINIA BEACH | 0.0% | 61.3% | 19.4% | 4.0% | 1.0% | 2.0% | 1.0% | 0.5% | 0.0% | 0.5% | 5.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | 13.6% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 5.6% | 36.3% | 10.3% | 19.6% | N/A | 5.0% | 16.1% | 1.4% | 5.7% | 0.0% | 9.4% |

TABLE SEVENTEEN

| ORGANIZATION NAME | RETAIL CUSTOMER DATA: TOTAL POPULATION SERVED | TOTAL HOUSEHOLDS SERVED | HOUSEHOLDS W/ RESIDENTS AGE 62 & UP | MEDIAN HOUSEHOLD INCOME | %-HOUSEHOLDS BELOW POVERTY LEV. | DISCOUNTS: LIFETIME | SENIORS | WELFARE | OTHER (DESCRIBE) |
|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 259,000 | 70,095 | 7,200 | 21,549 | 11.9% | No | No | No | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | 200,000 | 40,000 | N/A | N/A | N/A | No | No | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 200,000 | 66,600 | N/A | 38,135 | 5.8% | No | No | No | No |
| ARLINGTON WATER UTILITIES | 250,000 | 64,633 | N/A | N/A | N/A | No | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | 815,170 | 137,323 | N/A | N/A | N/A | No | No | No | AGRICULTURE |
| BOSTON WATER AND SEWER COMMISION | 571,000 | 243,750 | N/A | N/A | N/A | No | YES | NO | DISABLED |
| CHICAGO WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | No | No | No | 2.5% ON-TIME |
| CLEVELAND, DIVISION OF WATER | N/A | N/A | N/A | N/A | N/A | No | Yes | No | HOMESTEAD |
| DALLAS WATER UTILITIES | 960,850 | N/A | N/A | 25,000 | N/A | No | No | No | PROMPT PYMT |
| DES MOINES WATER WORKS | 260,250 | 62,200 | N/A | N/A | N/A | No | No | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 1,100,000 | 314,000 | N/A | 29,000 | 28.0% | No | No | No | LIFELINE |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | 737,600 | 277,650 | N/A | N/A | N/A | No | No | No | No |
| FORT WORTH WATER DEPT | 450,100 | N/A | N/A | N/A | N/A | No | No | No | No |
| HELIX WATER DISTRICT | 224,000 | 44,600 | N/A | N/A | N/A | No | No | No | KIDNEY DIAL. |
| HOUSTON PUBLIC WORKS | 27,115,200 | 389,389 | 4,143 | N/A | N/A | Yes | No | No | .No |
| HUNTSVILLE UTILITIES WATER DEPT | 167,000 | N/A | N/A | N/A | N/A | No | No | No | MULTI-FAMILY |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 454,000 | 128,575 | N/A | N/A | N/A | No | No | No | No |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| LONG BEACH WATER DEPARTMENT | 415,000 | 70,000 | N/A | N/A | N/A | No | No | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | 3,388,000 | N/A | N/A | N/A | N/A | No | Yes | No | DISABLED |
| LOUISVILLE WATER COMPANY | 690,654 | 200,000 | N/A | N/A | N/A | No | No | No | No |
| MANCHESTER WATER WORKS | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 700,000 | 123,000 | N/A | 22,330 | 21.0% | No | No | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 400,000 | 87,000 | N/A | 27,200 | N/A | No | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| MILWAUKEE WATER WORKS | 844,000 | 142,966 | N/A | N/A | N/A | No | No | No | No |
| NEWPORT NEWS WATER WORKS | N/A | N/A | N/A | N/A | N/A | No | No | No | LARGE USERS |
| NORFOLK DEPT OF UTILTIES | 650,000 | N/A | N/A | N/A | N/A | No | No | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | 40,356 | N/A | N/A | N/A | No | No | No | No |
| ORLANDO UTILITIES COMMISSION | 351,483 | N/A | N/A | N/A | N/A | No | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 429,400 | 171,760 | 14% | 21,704 | 13.0% | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | 212,000 | 88,000 | N/A | N/A | N/A | No | No | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | 249,000 | 76,400 | N/A | 16,000 | 2.0% | No | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 125,000 | 49,901 | N/A | N/A | N/A | No | No | No | No |
| SEATTLE WATER DEPARTMENT | 540,000 | 252,000 | 15% | 17,000 | N/A | No | Yes | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 386,520 | 89,237 | N/A | N/A | N/A | No | No | No | No |
| ST. LOUIS WATER DIVISION | N/A | N/A | N/A | N/A | N/A | No | No | No | No |
| TACOMA, WATER DIVISION | 54,000 | 71,200 | N/A | 14,546 | 10.6% | No | No | No | No |
| TAMPA WATER DEPT | 465,000 | 110,500 | 50,000 | 13,000 | 13.0% | No | No | No | No |
| TUCSON WATER DEPARTMENT | 554,000 | N/A | N/A | N/A | N/A | No | No | No | No |
| VIRGINIA BEACH | 337,153 | 90,000 | N/A | 32,442 | N/A | No | No | No | No |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 1,000,000 | 200,000 | N/A | N/A | N/A | No | No | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 413,774 | 67,539 | 28,091 | 24,100 | 4.0% | No | No | No | No |

TABLE EIGHTEEN

| ORGANIZATION NAME | PAYMENTS TO/FROM GOVERNMENT | FREE WATER SERVICE | FIXED INCOME PLAN |
|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | SELL WATER, PAY PROPERTY TAX | ZOO,PARKS,POOLS | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | SELL WATER | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | No | No |
| ARLINGTON WATER UTILITIES | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | N/A | N/A | No |
| BOSTON WATER AND SEWER COMMISION | PURCHASE WATER | STREET CLEANERS,COMMUNITY GARDENS | N/A |
| CHICAGO WATER DEPARTMENT | $52 M TO COVER CITY SERVICE | CHRS,SCHLS,PRKS,OTH NONPRFT | N/A |
| CLEVELAND, DIVISION OF WATER | N/A | FIRE DEPT,PUBLIC BLDGS | No |
| DALLAS WATER UTILITIES | No | No | No |
| DES MOINES WATER WORKS | SELL WATER | CITY OF DES MOINES | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | No | No | No |
| ERIE COUNTY WATER AUTHORITY | SELL WATER | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | SELL WATER | No | No |
| FORT WORTH WATER DEPT | SELL WATER & SEWER SERVICES | No | No |
| HELIX WATER DISTRICT | No | No | No |
| HOUSTON PUBLIC WORKS | SELL WATER | CITY GENERAL FUND DEPT | $50 CREDIT/6 MONTHS |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | CITY PARKS | No |
| KNOXVILLE UTILITIES BOARD | SELL WATER,PAY IN LIEU OF TAX | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | No |
| LONG BEACH WATER DEPARTMENT | SELL WATER | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | CITY RESERVE FUND | No | PROJECT ANGEL |
| LOUISVILLE WATER COMPANY | PAY DIVIDEND TO CITY | FIRE PROTECTION, CITY | No |
| MANCHESTER WATER WORKS | PROPERTY TAX | SCHOOLS, MUNICIPAL DEPTS. | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | CITY NON-PROFIT ACTIVITIES | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | No | No |
| MILWAUKEE WATER WORKS | SELL WATER & SERVICES | No | No |
| NEWPORT NEWS WATER WORKS | PAY TAX TO CITY | No | No |
| NORFOLK DEPT OF UTILTIES | PILOT ROI | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | PAY FOR WATER CONNECTION FEE | No | No |
| ORLANDO UTILITIES COMMISSION | No | PUBLIC FIRE DEPT | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | No | HYDRANTS, STREET CLEANERS | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | SELL WATER | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | SELL WATER, PAY 10% OF REV. | No | No |
| SEATTLE WATER DEPARTMENT | STATE & CITY TAX | FLUSHING WATER FOR LAKE | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | PAY IN LIEU OF TAX | No | No |
| ST. LOUIS WATER DIVISION | PAY TO CITY GOVERNMENT | CITY GOVERNMENT | No |
| TACOMA, WATER DIVISION | PAY UTILITY TAX,RECEIVE GRAN | No | No |
| TAMPA WATER DEPT | N/A | No | No |
| TUCSON WATER DEPARTMENT | PAY TAXES,SELL WATER | No | No |
| VIRGINIA BEACH | WATER WHEELAGE SERVICE | No | Yes |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | PAY 7 1/2% OF REVENUES | No | No |

# IV. FINANCIAL

TABLE NINETEEN IV. FINANCIAL

| ORGANIZATION NAME | SOURCE OF SUPPLY | TREATMENT | WATER QUALITY | TRANSMISSION & DISTRIBUTION | CUSTOMER ACCOUNTS | ADMINISTRATION GENERAL | ENGINEERING | FINANCE | POWER & PUMPING |
|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 1,441,310 | 1,596,530 | 0 | 46,752,920 | 1,567,020 | 1,389,640 | 1,160,250 | 241,200 | 840,310 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 1,467,250 | 1,415,780 | 0 | 3,165,780 | 1,541,030 | 4,347,250 | 0 | 0 | 0 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 7,484,380 | 0 | 0 | 0 | 0.00 | 962,820 | 0 | 0 | 0 |
| ARLINGTON WATER UTILITIES | 8,593,530 | 1,837,229 | 644,346 | 2,238,620 | 2,099,535 | 1,180,069 | 675,860 | N/A | 1,119,500 |
| BOARD OF WATER SUPPLY HONOLULU | 175,000 | 342,000 | 544,000 | 2,532,000 | 2,146,000 | 8,295,000 | 4,900,000 | 3,787,000 | 7,199,000 |
| BOSTON WATER AND SEWER COMMISION | 17,655,000 | 0 | 0 | 7,979,000 | 0 | 2,441,000 | 2,465,000 | 4,329,000 | 936,000 |
| CHICAGO WATER DEPARTMENT | 840,000 | 25,766,000 | 640,000 | 36,651,000 | 10,258,000 | 1,377,000 | 6,561,000 | 610,000 | 35,693,000 |
| CLEVELAND, DIVISION OF WATER | 0 | 13,848,212 | 0 | 23,589,227 | 8,939,549 | 11,001,674 | 12,920,796 | 0 | 1,705,800 |
| DALLAS WATER UTILITIES | 2,700,000 | 8,900,000 | 800,000 | 22,600,000 | 5,600,000 | 16,900,000 | 16,800,000 | 1,300,000 | 10,700,000 |
| DES MOINES WATER WORKS | 408,000 | 1,474,000 | 212,000 | 1,637,000 | 1,739,000 | 3,587,000 | 324,000 | 164,000 | 850,000 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 5,129,000 | 7,324,000 | 2,130,000 | 21,634,000 | 6,700,000 | 29,691,000 | 0 | 1,088,000 | 8,682,000 |
| ERIE COUNTY WATER AUTHORITY | 23,541 | 1,399,837 | 187,629 | 4,017,833 | 1,010,788 | 3,333,337 | 420,428 | 515,023 | 4,619,839 |
| FAIRFAX COUNTY WATER AUTHORITY | 813,000 | 5,249,000 | 0 | 4,569,000 | 1,718,000 | 3,968,000 | 0 | 0 | 5,220,000 |
| FORT WORTH WATER DEPT | 23,862,987 | 7,311,175 | 306,219 | 0 | 1,768,091 | 2,640,923 | 940,526 | 0 | 1,824,818 |
| HELIX WATER DISTRICT | 7,494,142 | 967,719 | | 482,107 | 0 | 116,451 | 530,668 | 0 | 1,089,507 |
| HOUSTON PUBLIC WORKS | 35,013,900 | 25,442,875 | 2,538,000 | 14,002,200 | 9,693,100 | 0 | 0 | 0 | 0 |
| HUNTSVILLE UTILITIES WATER DEPT | 975,000 | 170,000 | 400 | 625,000 | 483,000 | 737,000 | 0 | 101,956 | 1,176,000 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 3,786,260 | | 1,154,600 | 5,558,248 | 3,487,728 | 452,020 | 2,087,004 | 1,404,370 | 6,237,694 |
| KNOXVILLE UTILITIES BOARD | 0 | 2,033,000 | 3,328,000 | 4,767,000 | 1,408,000 | 2,768,000 | 524,000 | 230,000 | 1,401,000 |
| LAS VEGAS VALLEY WATER DISTRICT | 21,913,715 | 32,810 | 154,575 | 7,376,508 | 891,025 | 3,061,176 | 2,406,314 | 1,255,630 | 4,225,166 |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | 33,500,000 | 7,100,000 | 0 | 13,000,000 | 15,800,000 | 30,100,000 | 0 | 0 | 14,000,000 |
| LOUISVILLE WATER COMPANY | 28,300 | 4,313,400 | | 8,166,020 | 3,865,500 | 4,123,900 | 2,342,000 | 3,141,400 | 3,961,300 |
| MANCHESTER WATER WORKS | 318,296 | 848,466 | 90,085 | 613,752 | 413,314 | 1,448,728 | 53,016 | 276,757 | 560,703 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0 | 0 | 1,219,734 | 0 | 0 | 6,207,762 | 331,417 | 0 | 1,217,444 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 5,683,000 | | | 2,345,000 | 2,792,000 | 2,823,000 | 0 | 0 | 0 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 1,474,610 | 1,888,550 | 227,700 | 4,972,657 | 753,368 | 2,296,698 | 1,706,933 | 1,937,286 | 0 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 5,529,300 | 58,214,600 | 5,420,500 | N/A | N/A | 12,736,000 | 6,702,500 | 4,713,100 | SEE TREATMENT |
| MILWAUKEE WATER WORKS | 61,342 | 5,743,870 | 0 | 9,750,637 | 1,402,508 | 5,735,505 | 0 | 0 | 5,189,001 |
| NEWPORT NEWS WATER WORKS | 1,898,810 | 5,277,874 | 0 | 4,122,493 | 1,450,292 | 6,011,592 | 0 | 0 | 0 |
| NORFOLK DEPT OF UTILTIES | 14,262,000 | 0 | 0 | 3,217,000 | 9,628,000 | 1,028,000 | 0 | 0 | 0 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0 | 2,200,000 | 0 | 2,200,000 | 1,100,000 | 1,047,000 | 0 | 0 | 0 |
| ORLANDO UTILITIES COMMISSION | 3,700,000 | | | 1,800,000 | 2,000,000 | 3,000,000 | 0 | 0 | 0 |
| PASSAIC VALLEY WATER COMMISSION | 3,624,000 | 1,829,000 | 422,000 | 3,692,000 | 975,000 | 418,000 | 410,000 | 140,000 | 2,475,000 |
| PORTLAND BUREAU OF WATER WORKS | 1,559,800 | 134,000 | 1,308,000 | 12,960,700 | 4,196,400 | 1,403,800 | 1,881,400 | 2,825,900 | 803,700 |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 1,574,398 | 2,652,287 | 92,741 | 2,955,700 | 612,424 | 930,652 | 655,783 | 1,342,130 | 1,525,656 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 47,500 | 17,089 | 69,517 | 921,450 | 570,449 | 3,544,692 | 393,952 | 193,737 | 1,773,912 |
| SEATTLE WATER DEPARTMENT | 1,700,000 | 1,300,000 | 900,000 | 4,700,000 | 5,500,000 | 2,000,000 | 4,300,000 | 1,500,000 | 400,000 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 1,522,800 | 3,387,000 | 622,600 | 3,344,600 | 1,330,900 | 5,105,700 | 509,600 | 0 | 2,488,000 |
| ST. LOUIS WATER DIVISION | 0 | 4,358,605 | 473,999 | 4,373,564 | 3,560,111 | 1,254,840 | 676,163 | 1,225,322 | 5,805,120 |
| TACOMA, WATER DIVISION | 1,077,867 | 0 | 359,740 | 4,484,801 | 1,186,699 | 336,907 | 0 | 0 | 385,306 |
| TAMPA WATER DEPT | 4,644,980 | | 425,122 | 4,425,947 | 1,318,003 | 1,861,964 | 1,160,313 | | 1,586,259 |
| TUCSON WATER DEPARTMENT | 1,523,540 | 883,020 | 669,580 | 4,094,050 | 4,889,570 | 4,399,560 | 2,337,150 | 0 | 8,570,560 |
| VIRGINIA BEACH | 10,766,000 | 0 | 50,000 | 1,953,000 | 2,842,000 | 804,000 | 1,343,000 | 0 | 1,487,000 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 5,550,000 | 2,334,925 | 215,075 | 1,137,943 | 1,800,000 | 4,282,865 | 687,057 | 198,135 | 4,600,000 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 24,390 | 3,920,815 | 325,090 | 6,203,614 | 4,333,590 | 2,469,975 | 3,131,950 | 439,073 | 3,609,295 |

TABLE TWENTY

| ORGANIZATION NAME | DIRECT CAPITAL OUTLAYS | DEBT SERVICE | PILOT OR SIMILAR | BUDGETED SURPLUS | REPLACEMENT FACILIITES | CONSTRUCTION FACILIITES | MAINTENANCE | OTHER (DESCRIBE) | |
|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 7,492,400 | 2,376,410 | 0 | 0 | 24,000 | 0 | 1,434,720 | | 325,570 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 0 | 9,835,732 | 0 | 0 | 0 | 20,637,732 | 0 | | 0 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 413,360 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| ARLINGTON WATER UTILITIES | 143,325 | 12,901,122 | 950,000 | 0 | 1,260,000 | 0 | 961,116 | MISC. | 10,502,709 |
| BOARD OF WATER SUPPLY HONOLULU | 0 | 4,656,000 | 0 | 0 | 15,368,000 | 26,700,000 | 8,115,000 | | 0 |
| BOSTON WATER AND SEWER COMMISION | 478,000 | 6,204,000 | 0 | 1,604,000 | 7,534,000 | 0 | 0 | | 0 |
| CHICAGO WATER DEPARTMENT | N/A | 23,287,000 | 14,015,000 | 3,600,000 | 38,583,000 | N/A | N/A | | 31,749,000 |
| CLEVELAND, DIVISION OF WATER | 0 | 30,770,742 | 0 | 0 | 0 | 0 | 0 | | 0 |
| DALLAS WATER UTILITIES | 300,000 | 87,200,000 | 0 | 0 | 0 | 32,100,000 | 0 | WASTEWATER | 29,500,000 |
| DES MOINES WATER WORKS | 1,137,000 | 1,708,000 | 0 | 2,037,000 | 2,091,000 | 2,141,000 | 1,076,000 | STORES,FLEET | 883,000 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 20,876,000 | 33,360,000 | 0 | 0 | 5,062,000 | 59,700,000 | 0 | RECREATION,HYDRO | 4,224,000 |
| ERIE COUNTY WATER AUTHORITY | 0 | 6,948,447 | 0 | 0 | 2,434,467 | 956,155 | 429,128 | | 0 |
| FAIRFAX COUNTY WATER AUTHORITY | 51,995,000 | 11,768,000 | 0 | 0 | 0 | 0 | 0 | | 0 |
| FORT WORTH WATER DEPT | 5,737,503 | 10,758,835 | 2,198,512 | 163,313 | 210,000 | 1,973,323 | 6,061,393 | | 0 |
| HELIX WATER DISTRICT | 1,146,225 | 0 | 0 | 0 | 0 | 0 | 0 | | 0 |
| HOUSTON PUBLIC WORKS | 10,953,900 | 66,900,600 | 0 | 2,179,000 | 20,000,000 | 0 | 42,622,725 | LOST RECOVERY | 5,100,000 |
| HUNTSVILLE UTILITIES WATER DEPT | 0 | 2,516,778 | 732,000 | 0 | 2,845,800 | 2,771,990 | 1,196,000 | DEPRECIATION | 1,793,000 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 648,253 | 3,691,550 | 0 | 0 | 2,472,167 | 2,480,000 | 8,393,148 | ADMINISTRATION CHARGE | 967,931 |
| KNOXVILLE UTILITIES BOARD | 0 | 2,460,000 | 955,000 | 0 | 7,318,000 | 385,000 | 0 | | 0 |
| LAS VEGAS VALLEY WATER DISTRICT | 7,705,883 | 14,065,899 | 0 | 0 | 0 | 0 | 2,207,498 | | 0 |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | 103,400,000 | 42,900,000 | 12,400,000 | 0 | 0 | 0 | 34,200,000 | CONTRIB,PROP TAX | 24,700,000 |
| LOUISVILLE WATER COMPANY | 12,790,000 | 4,144,600 | 3,656,700 | 5,128,400 | 0 | 0 | 4,817,000 | | 0 |
| MANCHESTER WATER WORKS | 4,025,236 | 1,456,920 | 338,400 | 125,754 | N/A | N/A | 999,726 | CIAC | (2,045,000) |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0 | 0 | 0 | 0 | 0 | 0 | 494,787 | TRAINING,SUP | 522,683 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 23,072,000 | 2,442,000 | 0 | 0 | 0 | 0 | 0 | | 0 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 2,928,000 | 3,858,195 | 970,000 | 250,000 | 0 | 0 | 1,282,243 | RECREATION | 5,160,404 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| MILWAUKEE WATER WORKS | 9,995,257 | 0 | 5,950,000 | (3,876,120) | 0 | 0 | 0 | | 0 |
| NEWPORT NEWS WATER WORKS | 0 | 0 | 0 | 0 | 0 | 0 | 0 | CITY PAYMENTS | 4,662,769 |
| NORFOLK DEPT OF UTILTIES | 0 | 8,743,000 | 0 | 0 | 0 | 0 | 0 | | 0 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 8,000,000 | 2,047,000 | 0 | 0 | 0 | 0 | 0 | | 0 |
| ORLANDO UTILITIES COMMISSION | 0 | 500,000 | 400,000 | 0 | 600,000 | 9,500,000 | 0 | | 0 |
| PASSAIC VALLEY WATER COMMISSION | 495,000 | 3,911,000 | 0 | 0 | 600,000 | 1,100,000 | 1,688,000 | | 1,571,000 |
| PORTLAND BUREAU OF WATER WORKS | 9,077,800 | 9,167,500 | 1,910,000 | 0 | 0 | 0 | 0 | INVENTORY | 25,000 |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 881,356 | 2,744,800 | 500,000 | 0 | 4,424,757 | 0 | 1,455,926 | | 0 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 370,500 | 339,892 | 888,080 | 121,732 | 88,119 | 2,099,500 | 218,963 | | 0 |
| SEATTLE WATER DEPARTMENT | 300,000 | 6,900,000 | 3,800,000 | N/A | 9,300,000 | 5,000,000 | 900,000 | MISC. | 8,900,000 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 0 | 20,925,000 | 4,257,000 | 0 | 0 | 0 | 0 | | 0 |
| ST. LOUIS WATER DIVISION | 2,797,000 | 1,470,000 | 3,860,000 | 0 | 0 | 0 | 1,965,436 | | 0 |
| TACOMA, WATER DIVISION | 0 | 786,880 | 0 | 0 | 2,500,000 | 5,200,000 | 0 | TAXES | 2,787,441 |
| TAMPA WATER DEPT | 516,664 | 5,297,195 | 10,000 | 0 | 2,725,000 | 2,811,000 | 1,600,890 | | 568,260 |
| TUCSON WATER DEPARTMENT | 0 | 17,939,860 | 4,769,000 | 0 | 22,500,000 | 0 | 936,860 | PUBLIC INFO. | 233,760 |
| VIRGINIA BEACH | 690,000 | 7,171,000 | 0 | 749,000 | 803,000 | 0 | 0 | COST ALLOCATION | 907,000 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 870,000 | 5,802,951 | 1,005,000 | 6,926,049 | 7,925,000 | 22,427,000 | 4,535,000 | FICA | 725,000 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 1,296,333 | 4,491,565 | 2,632,725 | 0 | 4,052,495 | 0 | 991,893 | COMPUTER,SECURITY | 2,282,278 |

TABLE TWENTY-ONE

| ORGANIZATION NAME | TOTAL UTILITY REVENUES | PERCENTAGE OF REVENUES: USER CHARGES BASED ON METER READING | FLAT RATE CHARGES | FRONTAGE ASSESSMENTS | FINANCIAL ASSISTANCE CONSTRUCTION |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 23,819,230 | 90.2% | 0.0% | 0.4% | 0.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | 22,306,253 | 18.0% | 47.8% | 0.0% | 16.0% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 30,902,979 | 96.0% | 0.0% | 0.0% | 0.0% |
| ARLINGTON WATER UTILITIES | 49,107,600 | 91.8% | 0.2% | 0.7% | 0.0% |
| BOARD OF WATER SUPPLY HONOLULU | 75,728,658 | 60.7% | 0.3% | 0.0% | 27.9% |
| BOSTON WATER AND SEWER COMMISION | 53,289,000 | 87.0% | 0.0% | 0.0% | 0.0% |
| CHICAGO WATER DEPARTMENT | 204,871,565 | 61.5% | 15.4% | 0.0% | 8.1% |
| CLEVELAND, DIVISION OF WATER | 104,063,000 | 92.0% | 0.0% | 0.0% | 0.0% |
| DALLAS WATER UTILITIES | 236,400,000 | 44.8% | 0.0% | 0.0% | 0.0% |
| DES MOINES WATER WORKS | 20,618,000 | 91.0% | 2.0% | 0.0% | 0.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 143,500,000 | 54.0% | 0.0% | 0.0% | 7.0% |
| ERIE COUNTY WATER AUTHORITY | 26,296,442 | 88.6% | 1.0% | 0.0% | 0.0% |
| FAIRFAX COUNTY WATER AUTHORITY | 44,070,000 | 67.0% | 0.0% | 0.0% | 0.0% |
| FORT WORTH WATER DEPT | 65,755,620 | 95.0% | 0.0% | 0.0% | 0.0% |
| HELIX WATER DISTRICT | 20,343,269 | 90.4% | 0.0% | 0.0% | 0.0% |
| HOUSTON PUBLIC WORKS | 234,446,600 | 93.0% | 0.0% | 0.0% | 0.0% |
| HUNTSVILLE UTILITIES WATER DEPT | 10,443,000 | 88.9% | 0.0% | 0.0% | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 41,627,750 | 95.5% | 0.2% | 0.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | 22,706,000 | 85.2% | 0.2% | 0.0% | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | 60,435,000 | 65.0% | 0.0% | 0.0% | 0.0% |
| LONG BEACH WATER DEPARTMENT | 28,000,000 | 70.0% | 0.0% | 0.0% | 0.0% |
| LOS ANGELES DEPT OF WATER AND POWER | 257,000,000 | 0.0% | 0.0% | 0.0% | 0.0% |
| LOUISVILLE WATER COMPANY | 51,145,700 | 77.0% | 0.0% | 0.0% | 0.0% |
| MANCHESTER WATER WORKS | 7,633,000 | 87.0% | 1.0% | 0.0% | 0.0% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 45,000,000 | 100.0% | 0.0% | 0.0% | 0.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 33,359,807 | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 52,657,975 | 84.4% | 3.0% | 0.7% | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 517,848,000 | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | 39,952,000 | 79.2% | 0.0% | 4.9% | 0.0% |
| NEWPORT NEWS WATER WORKS | 36,687,031 | 75.6% | 0.0% | 0.0% | 0.0% |
| NORFOLK DEPT OF UTILTIES | 37,600,000 | 100.0% | 0.0% | 0.0% | 0.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 15,600,000 | 60.0% | 0.0% | 0.0% | 0.0% |
| ORLANDO UTILITIES COMMISSION | 16,323,159 | 94.0% | 0.0% | 0.0% | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | N/A | 49.0% | 3.0% | 0.0% | 0.0% |
| PORTLAND BUREAU OF WATER WORKS | 41,795,000 | 67.6% | 0.0% | 3.6% | 3.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 35,000,000 | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 22,348,600 | 81.0% | 1.0% | 0.0% | 0.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 11,700,000 | 63.0% | 0.0% | 11.0% | 0.0% |
| SEATTLE WATER DEPARTMENT | 38,309,925 | 80.0% | 0.2% | 0.8% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 46,113,000 | 83.6% | 0.0% | 0.0% | 0.0% |
| ST. LOUIS WATER DIVISION | 29,707,500 | 53.0% | 38.0% | 0.0% | 0.0% |
| TACOMA, WATER DIVISION | 21,435,920 | 48.0% | 0.0% | 0.0% | 0.0% |
| TAMPA WATER DEPT | 26,515,558 | 73.9% | 0.0% | 0.0% | 3.8% |
| TUCSON WATER DEPARTMENT | 73,746,510 | 86.0% | 0.0% | 0.0% | 5.0% |
| VIRGINIA BEACH | 40,831,000 | 54.0% | 0.0% | 17.0% | 0.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 43,850,000 | 86.0% | 0.5% | 0.0% | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 39,185,969 | 86.1% | 0.0% | 0.0% | 0.0% |

TABLE TWENTY-ONE A

| ORGANIZATION NAME | PERCENTAGE OF REVENUES: INTEREST INCOME | PROPERTY TAXES | COLLECTION CHARGE | SYSTEM DEVELOPMENT CHARGES | SERVICE AVAILABILITY CHARGES | FIRE HYDRANT RENTALS | SERVICE CONNECTION CHARGES | OTHER (DESCRIBE) | |
|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 0.0% | 0.0% | 0.0% | 0.1% | 0.0% | 0.1% | 1.0% | WATERSHED | 8.2% |
| ANCHORAGE WATER & WASTEWATER UTILITY | 9.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.0% | FIRE PROTECT | 9.0% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | MISC. | 4.0% |
| ARLINGTON WATER UTILITIES | 3.0% | 0.0% | 0.7% | 0.0% | 0.0% | 0.0% | 2.3% | MISC. | 1.3% |
| BOARD OF WATER SUPPLY HONOLULU | 5.5% | 0.0% | 0.0% | 4.2% | 0.0% | 0.0% | 0.1% | MISC. | 14.0% |
| BOSTON WATER AND SEWER COMMISION | 4.0% | 0.0% | 2.0% | 0.0% | 0.0% | 3.0% | 1.0% | PRIOR SAMPLES | 3.0% |
| CHICAGO WATER DEPARTMENT | 3.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | SURPLUS,MISC. | 11.4% |
| CLEVELAND, DIVISION OF WATER | 3.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 1.0% | RENT,BILLING | 3.0% |
| DALLAS WATER UTILITIES | 6.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | CONTRIB,MISC | 48.3% |
| DES MOINES WATER WORKS | 5.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | RENTALS,MISC. | 2.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 2.0% | 5.0% | 0.0% | 10.0% | 13.0% | 0.0% | 0.0% | POWER,GRANTS | 9.0% |
| ERIE COUNTY WATER AUTHORITY | 7.6% | 0.0% | 0.1% | 0.0% | 0.0% | 0.3% | 0.0% | | 0.0% |
| FAIRFAX COUNTY WATER AUTHORITY | 3.0% | 0.0% | 0.0% | 1.0% | 18.0% | 1.0% | 6.0% | MISC. | 4.0% |
| FORT WORTH WATER DEPT | 3.0% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 1.6% | MISC. | 0.2% |
| HELIX WATER DISTRICT | 2.3% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | 6.9% |
| HOUSTON PUBLIC WORKS | 3.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | MISC. | 4.0% |
| HUNTSVILLE UTILITIES WATER DEPT | 4.6% | 0.0% | 1.0% | 0.0% | 0.0% | 3.0% | 2.5% | | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 3.3% | 0.0% | 0.9% | 0.0% | 0.0% | 0.0% | 0.1% | | 0.0% |
| KNOXVILLE UTILITIES BOARD | 3.0% | 0.0% | 0.0% | 1.7% | 0.0% | 6.2% | 0.0% | MISC. | 3.7% |
| LAS VEGAS VALLEY WATER DISTRICT | 3.0% | 0.0% | 0.0% | 0.0% | 28.4% | 3.6% | 0.0% | | 0.0% |
| LONG BEACH WATER DEPARTMENT | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 1.0% | 25.0% | LAND LEASES | 2.0% |
| LOS ANGELES DEPT OF WATER AND POWER | 0.0% | 0.0% | 0.0% | 0.0% | 11.0% | 1.0% | 0.0% | PURCH WATER | 19.0% |
| LOUISVILLE WATER COMPANY | 2.8% | 0.0% | 3.0% | 0.0% | 19.0% | 1.3% | 0.0% | | 0.0% |
| MANCHESTER WATER WORKS | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 8.3% | 0.0% | JOBBING | 3.7% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 1.9% | 0.0% | 0.4% | 0.0% | 0.0% | 0.0% | 0.8% | RECREATION | 8.8% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| MILWAUKEE WATER WORKS | 3.7% | 0.0% | 1.0% | 0.0% | 0.0% | 6.0% | 0.6% | SEWER FEES | 4.6% |
| NEWPORT NEWS WATER WORKS | 1.1% | 0.0% | 1.6% | 4.6% | 6.5% | 3.0% | 0.0% | MISC. | 7.6% |
| NORFOLK DEPT OF UTILTIES | 4.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 19.0% | | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 3.0% | 0.0% | 37.0% | 0.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| ORLANDO UTILITIES COMMISSION | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 3.0% | 3.0% | | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | 0.0% | 0.0% | 0.0% | 0.0% | 21.0% | 0.0% | 2.0% | | 21.0% |
| PORTLAND BUREAU OF WATER WORKS | 3.5% | 1.8% | 1.3% | 0.4% | 13.8% | 0.0% | 10.7% | AGENCY REIMB | 3.3% |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A | | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 3.0% | 0.0% | 0.0% | 1.0% | 0.0% | 0.5% | 1.0% | BONDS | 9.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 0.0% | 0.0% | 0.0% | 16.0% | 0.0% | 1.0% | 6.0% | MISC. | 3.0% |
| SEATTLE WATER DEPARTMENT | 1.8% | 0.0% | 1.6% | 0.0% | 0.0% | 0.0% | 4.8% | RECOVERIES | 10.8% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 8.4% | 0.0% | 0.0% | 0.0% | 0.0% | 6.5% | 0.2% | RENTALS | 1.3% |
| ST. LOUIS WATER DIVISION | 2.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.1% | DAMAGE,WHOLES | 6.7% |
| TACOMA, WATER DIVISION | 4.0% | 0.0% | 0.0% | 0.0% | 48.0% | 0.0% | 4.0% | | 0.0% |
| TAMPA WATER DEPT | 3.8% | 0.0% | 0.0% | 0.0% | 0.0% | 2.0% | 9.2% | | 7.3% |
| TUCSON WATER DEPARTMENT | 3.0% | 0.0% | 1.0% | 0.0% | 0.0% | 3.0% | 1.0% | | 1.0% |
| VIRGINIA BEACH | 12.0% | 0.0% | 0.0% | 17.0% | 11.0% | 2.0% | 2.0% | NAVY WHEELAGE | 2.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 4.0% | 0.0% | 0.5% | 6.0% | 0.0% | 2.0% | 1.0% | | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 1.4% | 0.0% | 4.7% | 0.0% | 0.0% | 0.0% | 0.2% | MISC. | 7.6% |

TABLE TWENTY-TWO

| ORGANIZATION NAME | FINANCIAL PLANNING PROCESS | FUTURE YEARS PROJECTED | MEASURE PERFORMANCE BASED ON OPERATING RATIO | LONG-TERM DEBT TO EQUITY RATIO W/CONTR IN AID | LONG-TERM DEBT TO EQUITY RATIO NO CONTR IN AID |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | 6 | No | 0.33 | 0.33 |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | 5 | Yes | 0.49 | 5.25 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | N/A | No | 0.56 | 0.56 |
| ARLINGTON WATER UTILITIES | Yes | 10 | No | 0.82 | 0.87 |
| BOARD OF WATER SUPPLY HONOLULU | Yes | 6 | No | 0.12 | 0.42 |
| BOSTON WATER AND SEWER COMMISION | Yes | 5 | No | 2.10 | N/A |
| CHICAGO WATER DEPARTMENT | Yes | 5 | Yes | N/A | 1.74 |
| CLEVELAND, DIVISION OF WATER | Yes | 5 | Yes | 1.79 | 1.81 |
| DALLAS WATER UTILITIES | Yes | 5 | No | 0.57 | N/A |
| DES MOINES WATER WORKS | Yes | 10 | No | 0.25 | 0.25 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | 5 | No | 0.60 | 0.98 |
| ERIE COUNTY WATER AUTHORITY | No | N/A | Yes | 0.60 | 0.70 |
| FAIRFAX COUNTY WATER AUTHORITY | Yes | 10 | No | 0.62 | 0.63 |
| FORT WORTH WATER DEPT | Yes | 5 | Yes | N/A | N/A |
| HELIX WATER DISTRICT | Yes | 5 | No | N/A | N/A |
| HOUSTON PUBLIC WORKS | Yes | 5 | No | 1.86 | 2.26 |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | 5 | No | 0.92 | 1.51 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | 5 | No | 0.11 | 0.16 |
| KNOXVILLE UTILITIES BOARD | Yes | 5 | No | 0.54 | 0.54 |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | 5 | Yes | 0.57 | 1.30 |
| LONG BEACH WATER DEPARTMENT | Yes | 5 | Yes | 0.08 | 0.11 |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | 10 | No | 0.43 | 0.75 |
| LOUISVILLE WATER COMPANY | Yes | 5 | Yes | 0.89 | 0.41 |
| MANCHESTER WATER WORKS | Yes | 5 | No | 0.21 | 0.43 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | Yes | 5 | No | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | Yes | 5 | Yes | 0.00 | 0.00 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | 10 | No | 0.24 | 0.60 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | 22 | No | 0.44 | 0.45 |
| MILWAUKEE WATER WORKS | Yes | 2 | No | N/A | N/A |
| NEWPORT NEWS WATER WORKS | Yes | 5 | No | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | Yes | YES | No | N/A | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | Yes | 5 | No | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | Yes | 10 | No | N/A | 3.00 |
| PASSAIC VALLEY WATER COMMISSION | No | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | Yes | 10 | Yes | 0.37 | 0.46 |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | 5 | No | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | 15 | Yes | 0.33 | 0.57 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | No | N/A | No | 0.02 | 0.03 |
| SEATTLE WATER DEPARTMENT | Yes | 25 | No | 0.41 | 0.92 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | 5 | No | 0.13 | 0.33 |
| ST. LOUIS WATER DIVISION | Yes | 4 | No | 0.13 | 0.14 |
| TACOMA, WATER DIVISION | Yes | 5 | Yes | 0.10 | 0.23 |
| TAMPA WATER DEPT | Yes | 7 | No | 0.61 | 0.79 |
| TUCSON WATER DEPARTMENT | Yes | 10 | No | 0.29 | 0.32 |
| VIRGINIA BEACH | Yes | 5 | No | 0.30 | 1.59 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | Yes | 20 | No | 0.31 | 0.41 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | 5 | No | 0.17 | 0.18 |

TABLE TWENTY-TWO A

| | OUTSTANDING BOND ISSUES | | | | | |
|---|---|---|---|---|---|---|
| | GENERAL OBLIGATION | | REVENUE | | BOTH | |
| ORGANIZATION NAME | ANNUAL DEBT SERVICE | FACE AMOUNT OUTSTANDING | ANNUAL DEBT SERVICE | FACE AMOUNT OUTSTANDING | ANNUAL DEBT SERVICE | FACE AMOUNT OUTSTANDING |
| AKRON PUBLIC UTILITIES BUREAU | 625,000 | 4,750,000 | 1,397,966 | 11,605,000 | N/A | N/A |
| ANCHORAGE WATER & WASTEWATER UTILITY | 4,750,000 | 53,400,000 | 5,085,732 | 48,000,000 | 9,835,732 | 101,400,000 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 20,767,949 | 214,132,065 | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | N/A | N/A | 9,446,958 | 107,085,000 | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | 3,884,775 | 34,435,000 | 1,366,800 | 1,340,000 | N/A | N/A |
| BOSTON WATER AND SEWER COMMISION | 879,000 | 3,525,000 | 13,141,000 | 200,400,000 | N/A | N/A |
| CHICAGO WATER DEPARTMENT | N/A | N/A | 23,337,241 | 300,538,627 | N/A | N/A |
| CLEVELAND, DIVISION OF WATER | 800,000 | 6,400,000 | 30,000,000 | 344,300,000 | N/A | N/A |
| DALLAS WATER UTILITIES | N/A | N/A | 66,600,000 | 623,200,000 | N/A | N/A |
| DES MOINES WATER WORKS | N/A | N/A | 2,102,000 | 16,650,000 | N/A | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 13,740,000 | 83,295,000 | 18,465,000 | 247,900,000 | N/A | N/A |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | 6,948,447 | 77,410,000 | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | 11,768,000 | 164,870,000 | N/A | N/A |
| FORT WORTH WATER DEPT | N/A | N/A | 9,413,233 | N/A | N/A | N/A |
| HELIX WATER DISTRICT | 419,313 | 2,510,000 | 754,700 | 8,250,000 | N/A | N/A |
| HOUSTON PUBLIC WORKS | N/A | N/A | 58,281,000 | 816,635,000 | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | N/A | N/A | 2,516,778 | 35,955,000 | N/A | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | N/A | 3,691,550 | 15,820,000 | N/A | N/A |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | 2,460,000 | 22,495,000 | N/A | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | 14,065,899 | 113,500,255 | N/A | N/A | N/A | N/A |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | 504,993 | 5,529,941 | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | N/A | N/A | 46,600,000 | 370,200,000 | N/A | N/A |
| LOUISVILLE WATER COMPANY | N/A | N/A | 3,506,363 | 52,064,288 | N/A | N/A |
| MANCHESTER WATER WORKS | 1,454,000 | 8,455,000 | N/A | N/A | N/A | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 3,858,195 | 30,160,700 | N/A | N/A | N/A | N/A |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 11,670,000 | 525,560,000 | 3,460,000 | 369,590,000 | 15,130,000 | 895,150,000 |
| MILWAUKEE WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | 7,086,100 | 67,235,000 | N/A | N/A | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | 7,700,000 | 53,900,000 | N/A | N/A | N/A | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | N/A | N/A | 75,000,000 | 848,000,000 | N/A | N/A |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | 9,161,263 | 85,065,970 |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | N/A | 2,589,800 | 23,665,390 | N/A | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A |
| SEATTLE WATER DEPARTMENT | N/A | N/A | 6,900,000 | 60,000,000 | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | N/A | N/A | 20,925,000 | 231,365,000 | N/A | N/A |
| ST. LOUIS WATER DIVISION | N/A | N/A | 1,470,000 | 9,050,000 | N/A | N/A |
| TACOMA, WATER DIVISION | N/A | N/A | 1,200,000 | 10,032,500 | N/A | N/A |
| TAMPA WATER DEPT | N/A | N/A | 5,224,494 | 50,878,228 | N/A | N/A |
| TUCSON WATER DEPARTMENT | 4,148,000 | 16,740,000 | 13,360,000 | 113,790,000 | 17,508,000 | 130,530,000 |
| VIRGINIA BEACH | 1,932,942 | 8,323,606 | N/A | N/A | 10,968,676 | 76,155,000 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | 5,043,651 | 49,195,000 | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | N/A | N/A | 4,491,565 | 39,715,000 | N/A | N/A |

TABLE TWENTY-THREE

| ORGANIZATION NAME | SOURCE OF SUPPLY (000'S) | TREATMENT (000'S) | WATER QUALITY (000'S) | TRANSMISSION (000'S) | DISTRIBUTION (000'S) | OTHER (DESCRIBE) | |
|---|---|---|---|---|---|---|---|
| | FISCAL YEAR 1989 | | | | | | |
| AKRON PUBLIC UTILITIES BUREAU | 1,320 | 1,180 | 275 | 0 | 6,566 | UTILITY SERV. - | 2,822 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 0 | 500 | 0 | 3,050 | 1,540 | EQUIP,R & R - | 3,978 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | | | | $10,517 | | | |
| ARLINGTON WATER UTILITIES | 0 | 400 | 0 | 2,360 | 1,830 | STORAGE - | 2,800 |
| BOARD OF WATER SUPPLY HONOLULU | 6,980 | 0 | 14,965 | 8,135 | 0 | SUPPORT - | 150 |
| BOSTON WATER AND SEWER COMMISION | 0 | 0 | 0 | 0 | 16,312 | | 0 |
| CHICAGO WATER DEPARTMENT | 6,565 | 8,485 | 250 | 6,000 | 18,236 | METER,COMPUTER - | 982 |
| CLEVELAND, DIVISION OF WATER | 0 | 45,400 | 0 | 21,900 | 13,300 | | 0 |
| DALLAS WATER UTILITIES | 3,221 | 37,586 | 0 | 49,383 | | STUDIES,REHAB,MAINT | 4,157 |
| DES MOINES WATER WORKS | 71 | 270 | 31 | 5,127 | 4,632 | | 3,568 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 2,166 | 6,036 | 0 | 8,010 | 34,844 | RECREATION,HYDRO - | 26,625 |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | 10,020 | 4,840 | 0 | 33,725 | 0 | | 3,410 |
| FORT WORTH WATER DEPT | 0 | 0 | 0 | 3,034 | 2,000 | EDUC,IMPROV,SERV - | 2,867 |
| HELIX WATER DISTRICT | 0 | 108 | 0 | 100 | 1,705 | OPERATIONS CENTER - | 300 |
| HOUSTON PUBLIC WORKS | 13,960 | 72,500 | 265 | 29,210 | 27,832 | | 2,600 |
| HUNTSVILLE UTILITIES WATER DEPT | 100 | 1,000 | 0 | 200 | 0 | RESERVIOR - | 1,000 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 0 | 400 | 250 | 4,250 | 3,200 | GENERAL IMPROV.- | 3,000 |
| KNOXVILLE UTILITIES BOARD | 0 | 771 | 122 | 675 | 6,074 | | 0 |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | N/A | N/A | N/A | N/A | | N/A |
| LONG BEACH WATER DEPARTMENT | 0 | 475 | 0 | 2,722 | 3,571 | DEVELOPERS,PROJECTS - | 850 |
| LOS ANGELES DEPT OF WATER AND POWER | 5,000 | 3,300 | 300 | 3,600 | 98,200 | PLANT EQUIP - | 36,300 |
| LOUISVILLE WATER COMPANY | 646 | 2,763 | 0 | 9,893 | 569 | PUMP,EQUIP,AUTO - | 3,072 |
| MANCHESTER WATER WORKS | 0 | 0 | 0 | 0 | 870 | ENG,FACILITIES - | 400 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0 | 1,041 | 0 | 4,155 | 6,531 | MGMT,TOXIC ABATE.- | 4,714 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 0 | 0 | 0 | 3,175 | 1,500 | | 0 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | | N/A |
| MILWAUKEE WATER WORKS | 0 | 1,630 | 0 | 2,205 | 5,800 | METER READING - | 0 |
| NEWPORT NEWS WATER WORKS | 250 | 950 | 0 | 5,964 | 1,900 | OPER. FACILITIES - | 275 |
| NORFOLK DEPT OF UTILTIES | 0 | 0 | 0 | 10,800 | 4,000 | CONTINGENCY,IMPROV - | 650 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0 | 10,348 | 0 | 8,400 | 0 | MASTER PLAN - | 20 |
| ORLANDO UTILITIES COMMISSION | 0 | 4,300 | 0 | 0 | 5,700 | | 0 |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | N/A | | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 750 | 0 | 10 | 3,000 | 3,000 | METER REPL. - | 1,060 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 500 | 2,000 | 20 | 100 | 100 | | 0 |
| SEATTLE WATER DEPARTMENT | 734 | 279 | 0 | 13,586 | 0 | PROJECTING DEMAND - | 11,600 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 1,465 | 2,300 | 40 | 6,380 | 0 | GENERAL PLANT - | 1,770 |
| ST. LOUIS WATER DIVISION | 0 | 1,000 | 0 | 0 | 650 | | 0 |
| TACOMA, WATER DIVISION | 1,775 | 528 | 800 | 130 | 2,783 | STORAGE,ADDTS. - | 2,685 |
| TAMPA WATER DEPT | 440 | 300 | 0 | 0 | 4,796 | | 0 |
| TUCSON WATER DEPARTMENT | 6,483 | 22,057 | 0 | 20,585 | 4,092 | RECLAIMED,MISC - | 10,950 |
| VIRGINIA BEACH | 0 | 0 | 0 | 3,717 | 0 | | 0 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | N/A | N/A | N/A | N/A | N/A | | N/A |

TABLE TWENTY-THREE A

| ORGANIZATION NAME | FISCAL YEAR 1990 SOURCE OF SUPPLY (000'S) | TREATMENT (000'S) | WATER QUALITY (000'S) | TRANSMISSION (000'S) | DISTRIBUTION (000'S) | OTHER (DESCRIBE) | |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 560 | 3,555 | 500 | 3,400 | 7,727 | UTILITY SERV. - | 246 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 0 | 0 | 0 | 6,040 | 3,000 | EQUIP,R & R - | 1,554 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | | | | $15,331 | | | |
| ARLINGTON WATER UTILITIES | 800 | 50 | 310 | 1,300 | 3,705 | STORAGE - | 1,000 |
| BOARD OF WATER SUPPLY HONOLULU | 9,380 | 0 | 15,510 | 9,660 | 0 | SUPPORT - | 7,650 |
| BOSTON WATER AND SEWER COMMISION | 0 | 0 | 0 | 0 | 20,967 | | 0 |
| CHICAGO WATER DEPARTMENT | 2,500 | 6,330 | N/A | 32,862 | 34,616 | METER,COMPUTER - | 300 |
| CLEVELAND, DIVISION OF WATER | 0 | 46,900 | 0 | 31,600 | 13,700 | | 0 |
| DALLAS WATER UTILITIES | 849 | 62,181 | 0 | 44,074 | | STUDIES,REHAB | 4,108 |
| DES MOINES WATER WORKS | 0 | 616 | 0 | 1,417 | 2,905 | | 2,080 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 5,550 | 16,110 | 0 | 4,390 | 47,450 | RECREATION,HYDRO- | 22,660 |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | | N/A |
| FORT WORTH WATER DEPT | 0 | 36,600 | 162 | 11,990 | 250 | EDUC,IMPROV,SERV - | 1,539 |
| HELIX WATER DISTRICT | 0 | 105 | 0 | 200 | 1,790 | OPERATIONS CENTER - | 760 |
| HOUSTON PUBLIC WORKS | 15,000 | 7,483 | 275 | 24,300 | 24,815 | | 3,050 |
| HUNTSVILLE UTILITIES WATER DEPT | 0 | 2,000 | 0 | 0 | 0 | | 0 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 0 | 2,750 | 1,250 | 2,000 | 6,950 | GENERAL IMPROV.- | 2,500 |
| KNOXVILLE UTILITIES BOARD | 0 | 724 | 47 | 557 | 5,011 | | 0 |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | N/A | N/A | N/A | N/A | | N/A |
| LONG BEACH WATER DEPARTMENT | 0 | 3,400 | 0 | 2,741 | 2,380 | DEVELOPERS,PROJECTS- | 265 |
| LOS ANGELES DEPT OF WATER AND POWER | 6,300 | 1,400 | 100 | 2,000 | 107,000 | PLANT EQUIP - | 37,700 |
| LOUISVILLE WATER COMPANY | 232 | 1,346 | 0 | 8,500 | 388 | PUMP,EQUIP,AUTO - | 2,851 |
| MANCHESTER WATER WORKS | 0 | 0 | 0 | 0 | 815 | ENG,FACILITIES - | 125 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0 | 1,584 | 0 | 4,994 | 18,841 | MGMT,TOXIC ABATE.- | 13,762 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 2,200 | 0 | 0 | 3,100 | 1,000 | METER CONV. - | 1,500 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | | N/A |
| MILWAUKEE WATER WORKS | 0 | 1,970 | 0 | 2,220 | 6,510 | METER READING - | 100 |
| NEWPORT NEWS WATER WORKS | 2,660 | 2,600 | 0 | 6,575 | 3,150 | OPER. FACILITIES - | 600 |
| NORFOLK DEPT OF UTILTIES | 0 | 1,000 | 0 | 12,100 | 5,900 | CONTINGENCY,IMPROV - | 600 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0 | 11,115 | 0 | 6,459 | 0 | MASTER PLAN - | 20 |
| ORLANDO UTILITIES COMMISSION | 0 | 4,600 | 0 | 0 | 5,600 | | 0 |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | N/A | | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 750 | 3,000 | 50 | 1,000 | 7,000 | METER REPL. - | 1,260 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 200 | 200 | 20 | 100 | 100 | | 0 |
| SEATTLE WATER DEPARTMENT | 1,400 | 1,271 | 0 | 13,062 | 0 | PROJECTING DEMAND- | 7,375 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 1,335 | 4,600 | 40 | 6,180 | 0 | GENERAL PLANT - | 1,770 |
| ST. LOUIS WATER DIVISION | 0 | 600 | 0 | 0 | 600 | RESERVIOR - | 2,700 |
| TACOMA, WATER DIVISION | 23,556 | 178 | 800 | 1,400 | 2,305 | PLANT ADDITIONS - | 145 |
| TAMPA WATER DEPT | 550 | 1,150 | 500 | 1,600 | 6,060 | | 0 |
| TUCSON WATER DEPARTMENT | 5,038 | 48,908 | 0 | 10,857 | 4,477 | RECLAIMED,MISC - | 9,024 |
| VIRGINIA BEACH | 83,350 | 0 | 0 | 6,503 | 0 | | 0 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | N/A | N/A | N/A | N/A | N/A | | N/A |

TABLE TWENTY-THREE B

| ORGANIZATION NAME | SOURCE OF SUPPLY (000'S) | TREATMENT (000'S) | WATER QUALITY (000'S) | TRANSMISSION (000'S) | DISTRIBUTION (000'S) | OTHER (DESCRIBE) | |
|---|---|---|---|---|---|---|---|
| | FISCAL YEAR 1991 | | | | | | |
| AKRON PUBLIC UTILITIES BUREAU | 685 | 7,610 | 200 | 4,000 | 8,589 | UTILITY SERV. - | 73 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 0 | 500 | 0 | 2,200 | 1,250 | EQUIP,R & R - | 1,011 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | | | | $4,766 | | | |
| ARLINGTON WATER UTILITIES | 0 | 2,760 | 0 | 1,980 | 1,350 | STORAGE - | 1,800 |
| BOARD OF WATER SUPPLY HONOLULU | 12,665 | 0 | 11,950 | 2,340 | 0 | | 0 |
| BOSTON WATER AND SEWER COMMISION | 0 | 0 | 0 | 0 | 17,896 | | 0 |
| CHICAGO WATER DEPARTMENT | 0 | 4,155 | 0 | 4,200 | 22,007 | METER,COMPUTER - | 300 |
| CLEVELAND, DIVISION OF WATER | 0 | 1,600 | 0 | 18,500 | 8,600 | | 0 |
| DALLAS WATER UTILITIES | 400 | 65,125 | 0 | 34,575 | | STUDIES,REHAB | 3,018 |
| DES MOINES WATER WORKS | 0 | 0 | 0 | 2,350 | 3,703 | | 87 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 5,140 | 28,570 | 0 | 3,010 | 31,400 | RECREATION,HYDRO- | 7,960 |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | | N/A |
| FORT WORTH WATER DEPT | 0 | 0 | 0 | 1,815 | 6,700 | EDUC,IMPROV,SERV - | 1,200 |
| HELIX WATER DISTRICT | 0 | 165 | 0 | 333 | 942 | OPER. CENTER - | 1,190 |
| HOUSTON PUBLIC WORKS | 6,000 | 1,300 | 300 | 13,400 | 18,900 | | 2,350 |
| HUNTSVILLE UTILITIES WATER DEPT | 0 | 1,000 | 0 | 0 | 0 | RESERVOIR - | 500 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 0 | 2,750 | 1,250 | 900 | 12,600 | GENERAL IMPROV.- | 2,500 |
| KNOXVILLE UTILITIES BOARD | 0 | 3,355 | 97 | 411 | 3,697 | | 0 |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | N/A | N/A | N/A | N/A | | N/A |
| LONG BEACH WATER DEPARTMENT | 1,060 | 1,895 | 0 | 3,127 | 0 | DEVELOPERS,PROJECTS- | 250 |
| LOS ANGELES DEPT OF WATER AND POWER | 3,300 | 300 | 100 | 2,100 | 120,500 | PLANT EQUIP - | 30,700 |
| LOUISVILLE WATER COMPANY | 374 | 1,178 | 0 | 10,140 | 263 | PUMP,EQUIP,AUTO - | 2,553 |
| MANCHESTER WATER WORKS | 0 | 0 | 0 | 0 | 860 | ENG,FACILITIES - | 750 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0 | 2,761 | 0 | 6,373 | 23,467 | MGMT,TOXIC ABATE.- | 7,449 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 0 | 0 | 0 | 3,300 | 500 | METER CONV. - | 1,500 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | | N/A |
| MILWAUKEE WATER WORKS | 0 | 1,785 | 0 | 1,680 | 5,900 | METER READING - | 2,000 |
| NEWPORT NEWS WATER WORKS | 6,000 | 19,900 | 0 | 10,525 | 3,900 | OPER. FACILITIES - | 1700 |
| NORFOLK DEPT OF UTILTIES | 0 | 8,000 | 0 | 17,700 | 6,200 | CONTING,IMPROV - | 3,400 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 0 | 9,410 | 0 | 9,572 | 0 | MASTER PLAK - | 20 |
| ORLANDO UTILITIES COMMISSION | 0 | 4,200 | 0 | 0 | 5,600 | | 0 |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | N/A | | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | 0 | 6,000 | 0 | 1,000 | 7,000 | METER REPL. - | 1,000 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 200 | 200 | 20 | 100 | 100 | | 0 |
| SEATTLE WATER DEPARTMENT | 1,752 | 565 | 0 | 14,524 | 0 | PROJECTING DEMAND - | 253 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 2,050 | 2,530 | 40 | 6,180 | 0 | GENERAL PLANT - | 1,770 |
| ST. LOUIS WATER DIVISION | 0 | 600 | 0 | 0 | 0 | | 0 |
| TACOMA, WATER DIVISION | 29,824 | 1,178 | 0 | 0 | 2,345 | PLANT ADDITIONS - | 145 |
| TAMPA WATER DEPT | 490 | 400 | 0 | 3,950 | 6,410 | | 0 |
| TUCSON WATER DEPARTMENT | 9,606 | 5,099 | 0 | 8,455 | 7,987 | RECLAIMED,MISC - | 12,167 |
| VIRGINIA BEACH | 0 | 0 | 0 | 7,457 | 0 | | 0 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | N/A | N/A | N/A | N/A | N/A | | N/A |

TABLE TWENTY-FOUR

| ORGANIZATION NAME | CIP FUNDING: OPERATING FUNDS | CIP FUNDING: DEBT FINANCING EXISTING | CIP FUNDING: DEBT FINANCING NEW | PROBLEMS WITH DEBT ISSUES | PROBLEMS WITH RAISING REVENUES |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 59.0% | 0.0% | 100.0% | No | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | 50.0% | 50% | | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 3.0% | 0.0% | 100.0% | No | No |
| ARLINGTON WATER UTILITIES | 19.0% | 26.0% | 74.0% | No | No |
| BOARD OF WATER SUPPLY HONOLULU | 11.0% | 13.0% | 76.0% | No | No |
| BOSTON WATER AND SEWER COMMISION | 47.6% | 40.0% | 60.0% | No | No |
| CHICAGO WATER DEPARTMENT | 64.0% | 40.0% | 60.0% | YES | No |
| CLEVELAND, DIVISION OF WATER | 24.0% | 74.0% | 26.0% | No | No |
| DALLAS WATER UTILITIES | 33.0% | 67% | | No | No |
| DES MOINES WATER WORKS | 43.0% | 35.0% | 65.0% | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 30.0% | 1.0% | 99.0% | No | No |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | No | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | 55.0% | 0.0% | 100.0% | No | No |
| FORT WORTH WATER DEPT | 0.0% | 100% | | No | No |
| HELIX WATER DISTRICT | 100.0% | 0.0% | 0.0% | No | No |
| HOUSTON PUBLIC WORKS | 14.0% | 0.0% | 100.0% | No | No |
| HUNTSVILLE UTILITIES WATER DEPT | 50.0% | 100.0% | 0.0% | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 25.0% | 75% | | No | No |
| KNOXVILLE UTILITIES BOARD | 47.0% | 65.0% | 35.0% | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | 30.0% | 30.0% | 70.0% | No | No |
| LONG BEACH WATER DEPARTMENT | 100.0% | 0.0% | 0.0% | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | 45.0% | 0.0% | 100.0% | No | No |
| LOUISVILLE WATER COMPANY | 100.0% | 0.0% | 0.0% | No | No |
| MANCHESTER WATER WORKS | 20.0% | 90.0% | 10.0% | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0.0% | 0.0% | 100.0% | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 90.0% | 0.0% | 100.0% | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 25.0% | 3.0% | 97.0% | No | No |
| MILWAUKEE WATER WORKS | 100.0% | 0.0% | 0.0% | No | No |
| NEWPORT NEWS WATER WORKS | 16.5% | 0.0% | 100.0% | No | No |
| NORFOLK DEPT OF UTILTIES | 2.0% | 0.0% | 100.0% | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 90.0% | 0.0% | 100.0% | No | No |
| ORLANDO UTILITIES COMMISSION | 80.0% | 0.0% | 100.0% | No | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 50.0% | 0.0% | 100.0% | No | RATE INCR UNPOPULAR |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | 75.0% | 100.0% | 0.0% | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 50.0% | 0.0% | 100.0% | No | No |
| SEATTLE WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 55.0% | 0.0% | 100.0% | No | No |
| ST. LOUIS WATER DIVISION | 100.0% | 0.0% | 0.0% | No | REJECTED BOND ISSUES & RATE |
| TACOMA, WATER DIVISION | 39.0% | 0.0% | 100.0% | No | No |
| TAMPA WATER DEPT | 58.0% | 32.0% | 68.0% | No | No |
| TUCSON WATER DEPARTMENT | 50.0% | 85.0% | 15.0% | No | No |
| VIRGINIA BEACH | 1.0% | 0.0% | 100.0% | No | No |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 50.0% | 0.0% | 100.0% | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 10.0% | 100.0% | 0.0% | No | No |

# V. CUSTOMER BILLING DATA

TABLE TWENTY-FIVE V. CUSTOMER BILLING DATA

| ORGANIZATION NAME | RATES REGULATED BY STATE AGENCY | MINIMUM CHARGE FOR METERED ACCT ($) | AMOUNT & BASIS OF CHARGES | UNIFORM RATE STRUCTURE | BLOCK RATE STRUCTURE | INCLINING BLOCK RATE | WINTER/ SUMMER RATE DIFFERENTIAL |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | No | Yes | $2.02/MONTH | No | Yes | No | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | Yes. | $2.31 FOR 1ST 1,000 GALLONS | Yes | No | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | Yes | $8.60/1ST 0-5,000 GALLONS QUARTERLY | Yes | No | No | No |
| ARLINGTON WATER UTILITIES | No | Yes | $4.85/2000 GALLONS MONTHLY MINIMUM | Yes | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | No | No | N/A | Yes | Yes | Yes | No |
| BOSTON WATER AND SEWER COMMISION | No | No | N/A | Yes | Yes | YES | No |
| CHICAGO WATER DEPARTMENT | No | No | N/A | Yes | No | No | No |
| CLEVELAND, DIVISION OF WATER | No | Yes | N/A | No | Yes | Yes | No |
| DALLAS WATER UTILITIES | Yes | Yes | 5/8" METER $2.94/MONTHLY | No | Yes | Yes | Yes |
| DES MOINES WATER WORKS | No | Yes | MONTHLY CHARGE BY METER SIZE | No | Yes | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | No | Yes | $3.75/MONTH METER SIZE | Yes | No | No | No |
| ERIE COUNTY WATER AUTHORITY | No | Yes | N/A | Yes | Yes | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | No | Yes | $3.25 SERVICE CHARGE | Yes | No | No | Yes |
| FORT WORTH WATER DEPT | No | No | N/A | No | Yes | Yes | Yes |
| HELIX WATER DISTRICT | No | No | N/A | No | Yes | No | No |
| HOUSTON PUBLIC WORKS | No | Yes | $4.47/2000 GALLONS OR LESS | Yes | Yes | No | No |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | $2.75 MONTHLY AVAILABILITY CHARGE | No | Yes | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | No | Yes | 5/8" METER $9.60 BIMONTHLY | No | Yes | No | No |
| KNOXVILLE UTILITIES BOARD | No | Yes | $6.25/MONTH FOR 1ST 300 CUBIC FEET | No | Yes | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | Yes | $.73 PER 1000 GALLONS | Yes | No | No | No |
| LONG BEACH WATER DEPARTMENT | No | Yes | METER SIZE | Yes | N/A | N/A | No |
| LOS ANGELES DEPT OF WATER AND POWER | No | Yes | $5.30 RESID & COMM, $2.10 LIFELINE | Yes | No | No | Yes |
| LOUISVILLE WATER COMPANY | No | Yes | METER SIZE | No | Yes | No | No |
| MANCHESTER WATER WORKS | Yes | Yes | $13.83/4500 GALLONS QUARTERLY | No | Yes | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | No | No | N/A | Yes | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | Yes | 5/8" METER $2.27/3.37 CUBIC FEET | No | Yes | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | No | Yes | METER SIZE | No | Yes | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | No | N/A | N/A | Yes | No | No | No |
| MILWAUKEE WATER WORKS | Yes | Yes | METER SIZE | No | Yes | No | No |
| NEWPORT NEWS WATER WORKS | No | Yes | BIMONTHLY | N/A | Yes | No | Yes |
| NORFOLK DEPT OF UTILTIES | No | No | N/A | No | Yes | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | Yes | $7.31/3000 GALLONS MONTHLY | Yes | No | No | No |
| ORLANDO UTILITIES COMMISSION | No | Yes | MONTHLY CUSTOMER CHARGE | No | Yes | No | No |
| PASSAIC VALLEY WATER COMMISSION | No | Yes | 5/8" METER $18.25/QUARTERLY | Yes | Yes | No | No |
| PORTLAND BUREAU OF WATER WORKS | No | Yes | METER SIZE | Yes | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | No | No | N/A | No | Yes | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | No | Yes | $5.70/MONTH FOR 1ST 1,000 CUBIC FT | Yes | Yes | Yes | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | No | Yes | 5/8" METER $4.50 MONTHLY | Yes | No | No | No |
| SEATTLE WATER DEPARTMENT | No | Yes | 3/4" METER $1.40/MONTH | Yes | No | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | No | Yes | METER SIZE | No | Yes | No | No |
| ST. LOUIS WATER DIVISION | No | Yes | METER SIZE | No | Yes | No | No |
| TACOMA, WATER DIVISION | No | Yes | METER SIZE | Yes | Yes | No | No |
| TAMPA WATER DEPT | No | Yes | METER SIZE | Yes | No | No | No |
| TUCSON WATER DEPARTMENT | No | Yes | METER SIZE | No | Yes | Yes | Yes |
| VIRGINIA BEACH | No | Yes | $3.35/MONTH | Yes | No | No | No |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | Yes | 5/8" METER $2.46/MONTH | N/A | Yes | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | No | Yes | $3.60 METER CHARGE | Yes | No | No | No |

TABLE TWENTY-SIX

| ORGANIZATION NAME | TYPICAL QUARTERLY BILLS (TOTAL) LOW USAGE RESIDENTIAL ($)/QUARTER | HIGH USAGE RESIDENTIAL ($)/QUARTER | LOW USAGE COMMERCIAL ($)/QUARTER | HIGH USAGE COMMERCIAL ($)/QUARTER | INDUSTRIAL ($)/QUARTER |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 59.26 | 127.07 | 270.48 | 479.12 | 10,892.44 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 69.30 | 138.60 | 346.50 | 693.00 | 17,325.00 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 14.25 | 93.25 | 217.75 | 425.75 | 9,508.75 |
| ARLINGTON WATER UTILITIES | 19.25 | 37.25 | 91.25 | 181.25 | 4,501.25 |
| BOARD OF WATER SUPPLY HONOLULU | 38.18 | 71.41 | 171.38 | 337.89 | 8,334.75 |
| BOSTON WATER AND SEWER COMMISION | 76.01 | 152.69 | 385.02 | 774.74 | 19,944.86 |
| CHICAGO WATER DEPARTMENT | 23.64 | 47.28 | 118.20 | 236.30 | 591.00 |
| CLEVELAND, DIVISION OF WATER | 25.42 | 52.38 | 133.26 | 268.06 | 6,738.46 |
| DALLAS WATER UTILITIES | N/A | N/A | N/A | N/A | N/A |
| DES MOINES WATER WORKS | 50.56 | 101.12 | 252.80 | 505.60 | 7,128.89 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 39.61 | 78.32 | 184.55 | 348.66 | 7,536.68 |
| ERIE COUNTY WATER AUTHORITY | 44.37 | 88.47 | 220.77 | 441.27 | 9,420.27 |
| FAIRFAX COUNTY WATER AUTHORITY | 24.25 | 45.65 | 111.00 | 217.25 | 5,320.00 |
| FORT WORTH WATER DEPT | 48.75 | 102.90 | 310.45 | 616.70 | 8,887.50 |
| HELIX WATER DISTRICT | 47.70 | 98.14 | 230.26 | 439.26 | 9,492.06 |
| HOUSTON PUBLIC WORKS | 70.17 | 173.37 | 301.44 | 590.52 | 42,649.89 |
| HUNTSVILLE UTILITIES WATER DEPT | 33.75 | 59.25 | 143.60 | 254.60 | 4,169.00 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 48.00 | 86.00 | 189.00 | 337.00 | 6506.00 |
| KNOXVILLE UTILITIES BOARD | 70.00 | 159.00 | 377.00 | 677.00 | 9,211.00 |
| LAS VEGAS VALLEY WATER DISTRICT | 47.53 | 69.43 | 206.66 | 369.81 | 6,376.90 |
| LONG BEACH WATER DEPARTMENT | 37.31 | 105.69 | 261.57 | 511.47 | 10,796.31 |
| LOS ANGELES DEPT OF WATER AND POWER | 46.28 | 85.36 | 218.70 | 422.40 | 9,912.00 |
| LOUISVILLE WATER COMPANY | 40.74 | 89.73 | 217.74 | 420.09 | 8,595.99 |
| MANCHESTER WATER WORKS | 36.27 | 62.67 | 140.77 | 270.77 | 5,490.77 |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 24.03 | 46.59 | 73.41 | 261.00 | 3,283.77 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 41.92 | 77.92 | 195.83 | 375.83 | 7,456.57 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | 31.00 | 63.00 | 148.00 | 282.00 | 5,321.00 |
| NEWPORT NEWS WATER WORKS | 56.96 | 110.47 | 269.58 | 535.54 | 11,639.80 |
| NORFOLK DEPT OF UTILTIES | 73.47 | 124.49 | 308.50 | 545.68 | 10,905.58 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 44.84 | 72.07 | 174.66 | 342.70 | 8,152.37 |
| ORLANDO UTILITIES COMMISSION | 53.97 | 102.69 | 228.48 | 432.33 | 10,251.33 |
| PASSAIC VALLEY WATER COMMISSION | 45.05 | 92.85 | 208.10 | 745.85 | N/A |
| PORTLAND BUREAU OF WATER WORKS | 34.45 | 63.05 | 150.68 | 291.43 | 6,793.33 |
| RALEIGH DEPT OF PUBLIC UTILITIES | 45.83 | 90.25 | 219.76 | 433.40 | 726.24 |
| SALT LAKE CITY PUBLIC UTILITIES | 17.48 | 19.00 | 56.11 | 88.61 | 870.11 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 25.25 | 52.15 | 132.70 | 242.00 | 750.80 |
| SEATTLE WATER DEPARTMENT | 28.80 | 56.40 | 83.01 | 157.89 | 3,552.99 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 74.48 | 135.37 | 309.42 | 565.84 | 11,569.88 |
| ST. LOUIS WATER DIVISION | 38.00 | 70.96 | 162.48 | 291.29 | 11,470.50 |
| TACOMA, WATER DIVISION | 31.06 | 68.32 | 147.50 | 270.50 | 4,204.20 |
| TAMPA WATER DEPT | 26.84 | 53.68 | 134.30 | 268.40 | 6,710.00 |
| TUCSON WATER DEPARTMENT | 54.27 | 114.72 | 227.16 | 448.35 | 9,068.00 |
| VIRGINIA BEACH | 25.15 | 49.65 | 119.55 | 233.95 | 5,541.50 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 41.40 | 78.09 | 166.56 | 318.27 | 6,360.06 |

TABLE TWENTY-SEVEN

| ORGANIZATION NAME | AVG RESIDENTIAL BILL DETACHED SINGLE FAMILY ($) | PER | AVG RESIDENTIAL BILL ALL RESID. ($) | PER | RESIDENTIAL WATER USAGE SUMMER G/D | WINTER G/D | SECURITY DEPOSIT |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 37.98 | QUARTER | N/A | N/A | 197.00 | 197.00 | N/A |
| ANCHORAGE WATER & WASTEWATER UTILITY | 54.75 | QUARTER | N/A | N/A | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 31.75 | QUARTER | 31.75 | QUARTER | N/A | N/A | No |
| ARLINGTON WATER UTILITIES | 60.78 | QUARTER | 43.92 | QUARTER | 511.00 | 263.00 | $80 W/O CREDIT,COMMERCIAL 2 MONTHS |
| BOARD OF WATER SUPPLY HONOLULU | N/A | N/A | 52.00 | QUARTER | 492.00 | 410.00 | No |
| BOSTON WATER AND SEWER COMMISION | 72.77 | QUARTER | 220.95 | QUARTER | N/A | N/A | No |
| CHICAGO WATER DEPARTMENT | 22.77 | QUARTER | 40.82 | QUARTER | 500.00 | 250.00 | No |
| CLEVELAND, DIVISION OF WATER | 43.12 | QUARTER | N/A | N/A | N/A | N/A | TENTANT ACCTS LISTED IN THEIR NAME |
| DALLAS WATER UTILITIES | 37.11 | QUARTER | 37.11 | QUARTER | 410.00 | 240.00 | REQ. UNLESS GOOD CREDIT,OWNER,SENIOR |
| DES MOINES WATER WORKS | 86.00 | QUARTER | 69.50 | QUARTER | 250.00 | 200.00 | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 36.77 | QUARTER | 27.92 | QUARTER | 400.00 | 235.00 | FOR CAUSE ONLY |
| ERIE COUNTY WATER AUTHORITY | 37.02 | QUARTER | 37.02 | QUARTER | 105.00 | 92.00 | No |
| FAIRFAX COUNTY WATER AUTHORITY | 20.05 | QUARTER | N/A | N/A | 130.00 | 100.00 | No |
| FORT WORTH WATER DEPT | 16.90 | MONTH | N/A | N/A | N/A | N/A | AVG. TWO MONTH BILL |
| HELIX WATER DISTRICT | 49.50 | QUARTER | N/A | N/A | N/A | N/A | IF ACCT IN ARREARS TWICE IN ONE YEAR |
| HOUSTON PUBLIC WORKS | 51.99 | QUARTER | N/A | N/A | N/A | N/A | $75 NON-OWNERS,$200 NO CREDIT |
| HUNTSVILLE UTILITIES WATER DEPT | 23.55 | QUARTER | 23.55 | QUARTER | 335.00 | 200.00 | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | N/A | 45.00 | QUARTER | 333.00 | 190.00 | EST. COST FOR 2 BILLING PERIODS |
| KNOXVILLE UTILITIES BOARD | 44.24 | QUARTER | N/A | N/A | 229.00 | 184.00 | $100 FOR WATER,WASTEWATER,ELECTRIC |
| LAS VEGAS VALLEY WATER DISTRICT | 72.57 | QUARTER | N/A | N/A | N/A | N/A | FLAT AMOUNT,3 HIGHEST MONTHS |
| LONG BEACH WATER DEPARTMENT | 45.00 | QUARTER | N/A | N/A | 400.00 | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | 59.96 | QUARTER | 59.96 | QUARTER | 531.00 | 354.00 | 2 BILLING PERIODS,CREDIT ESTABLISHED |
| LOUISVILLE WATER COMPANY | 26.82 | QUARTER | N/A | N/A | N/A | N/A | No |
| MANCHESTER WATER WORKS | 26.37 | QUARTER | 42.87 | QUARTER | N/A | N/A | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 27.33 | QUARTER | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 33.00 | QUARTER | 50.00 | QUARTER | 43.50 | 33.20 | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | 21.55 | QUARTER | 27.67 | QUARTER | 331.00 | 253.00 | No |
| NEWPORT NEWS WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | No |
| NORFOLK DEPT OF UTILTIES | 45.00 | BI-MONTHLY | 40.00 | BI-MONTHLY | N/A | N/A | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 10.52 | MONTH | N/A | N/A | N/A | N/A | $28 RESIDENTIAL,$140 COMMERCIAL |
| ORLANDO UTILITIES COMMISSION | 7.08 | QUARTER | 9.08 | QUARTER | 96.00 | 110.00 | $20 RESIDENTIAL,$40 COMMERCIAL |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 25.74 | QUARTER | N/A | N/A | 33.70 | 18.70 | $25 FOR 1ST YEAR |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | 26.07 | QUARTER | N/A | N/A | ESTIMATED ONE MONTH BILL |
| SALT LAKE CITY PUBLIC UTILITIES | 33.82 | QUARTER | 40.00 | QUARTER | 180.00 | 70.00 | > OF $50 OR TWO MONTH BILL |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 37.47 | QUARTER | N/A | N/A | N/A | N/A | AVG. TWO MONTH BILL |
| SEATTLE WATER DEPARTMENT | 6.32 | MONTH | N/A | N/A | 265.00 | 175.00 | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 53.89 | QUARTER | N/A | N/A | N/A | N/A | COMMERCIAL,INDUSTRIAL CUSTOMERS |
| ST. LOUIS WATER DIVISION | 30.00 | QUARTER | 30.00 | QUARTER | N/A | N/A | FLAT RATE PAID 3 MONTH'S ADVANCE |
| TACOMA, WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | HIGHEST TWO MONTH BILL |
| TAMPA WATER DEPT | 20.13 | QUARTER | N/A | N/A | 325.00 | 225.00 | N/A |
| TUCSON WATER DEPARTMENT | 57.09 | QUARTER | N/A | N/A | 423,000.00 | 288.00 | NON-RESIDENTIAL |
| VIRGINIA BEACH | N/A | QUARTER | 16.53 | MONTH | 217.00 | 183.00 | No |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 27.39 | QUARTER | 23.82 | QUARTER | 639.00 | 523.00 | RENTALS, COMMERCIAL |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 23.12 | QUARTER | 28.72 | QUARTER | 300.00 | 177.00 | AVG. TWO MONTH BILL |

TABLE TWENTY-EIGHT

| ORGANIZATION NAME | DELINQUENCY/NONPYMT INACTIVE ACCOUNTS | DELINQUENCY/NONPYMT ACTIVE ACCOUNTS | % OF DELIQUENT PAYMENTS OVER 90 DAYS ACTIVE | % OF DELIQUENT PAYMENTS OVER 90 DAYS INACTIVE | % OF DELIQUENT PAYMENTS OVER 180 DAYS ACTIVE | % OF DELIQUENT PAYMENTS OVER 180 DAYS INACTIVE | % OF UNCOLLECTIBLE REVENUE TO BILLABLE REV. |
|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 10.0% | 90.0% | 34% | N/A | N/A | N/A | 0.34% |
| ANCHORAGE WATER & WASTEWATER UTILITY | N/A | N/A | 6-10% | 6-10% | N/A | 1-5% | 8.00% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | 5.0% | 95.0% | 0% | 1-5% | 0% | > 20% | 0.15% |
| BOARD OF WATER SUPPLY HONOLULU | 20.0% | 80.0% | 0.00 | > 20% | N/A | > 20% | 0.02% |
| BOSTON WATER AND SEWER COMMISION | 0.0% | 100.0% | 11-20% | N/A | 11-20% | N/A | 5.00% |
| CHICAGO WATER DEPARTMENT | 30.0% | 70.0% | N/A | N/A | N/A | N/A | 3.50% |
| CLEVELAND, DIVISION OF WATER | 15.0% | 85.0% | > 20% | 1-5% | > 20% | 1-5% | 1.30% |
| DALLAS WATER UTILITIES | 70.0% | 30.0% | 6-10% | 11-20% | 1-5% | > 20% | 0.47% |
| DES MOINES WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | 1.00% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 6.0% | 94.0% | 1-5% | 1-5% | N/A | N/A | 0.00% |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | 0.15% |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | 0.50% |
| FORT WORTH WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| HELIX WATER DISTRICT | 0.0% | 100.0% | 1-5% | N/A | N/A | N/A | 0.25% |
| HOUSTON PUBLIC WORKS | 72.0% | 28.0% | > 20% | N/A | 1-5% | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | 0.06% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | N/A | N/A | N/A | N/A | N/A | 2.00% |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | N/A | N/A | N/A | N/A | 0.40% |
| LAS VEGAS VALLEY WATER DISTRICT | N/A | N/A | N/A | N/A | N/A | N/A | 0.17% |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | 0.10% |
| LOS ANGELES DEPT OF WATER AND POWER | 5.0% | 95.0% | 1-5% | 1-5% | 1-5% | 1-5% | 0.04% |
| LOUISVILLE WATER COMPANY | 1.5% | 98.5% | N/A | 1-5% | N/A | 1-5% | 0.35% |
| MANCHESTER WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | 0.10% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | N/A | N/A | N/A | N/A | N/A | N/A | 1.00% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | 0.0% | 100.0% | 0% | 0% | 100% | 0% | 0.00% |
| NEWPORT NEWS WATER WORKS | 1.0% | 99.0% | 11-20% | N/A | N/A | N/A | 0.40% |
| NORFOLK DEPT OF UTILTIES | 100.0% | 0.0% | N/A | N/A | N/A | N/A | 1.00% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | 0.50% |
| ORLANDO UTILITIES COMMISSION | 0.0% | 100.0% | 1-5% | N/A | 1-5% | N/A | 0.00% |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | 5.00% |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | 0.50% |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A | N/A | 2.00% |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | N/A | 6-10% | > 20% | 6-10% | > 20% | 0.50% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SEATTLE WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 0.0% | 100.0% | 6-10% | N/A | 6-10% | N/A | 0.01% |
| ST. LOUIS WATER DIVISION | 5.0% | 95.0% | N/A | N/A | N/A | N/A | 1.00% |
| TACOMA, WATER DIVISION | 80.0% | 20.0% | 11-20% | 11-20% | 6-10% | 6-10% | 1.00% |
| TAMPA WATER DEPT | N/A | N/A | 1-5% | 0% | N/A | 0% | 0.50% |
| TUCSON WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | 1.00% |
| VIRGINIA BEACH | 10.0% | 90.0% | 6-10% | 11-20% | 1-5% | > 20% | 0.60% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | N/A | N/A | 0.36% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 50.0% | 50.0% | N/A | N/A | N/A | N/A | 0.70% |

TABLE TWENTY-NINE

| ORGANIZATION NAME | COLLECTION METHODS: TURN OFF WATER AVAILABLE | TURN OFF WATER USE | WRITE NOTICE AVAILABLE | WRITE NOTICE USE | TELEPHONE CALLS AVAILABLE | TELEPHONE CALLS USE | COLLECTION AGENCIES AVAILABLE | COLLECTION AGENCIES USE | TAX DUPLICATE AVAILABLE | TAX DUPLICATE USE | REAL PROPERTY LIENS AVAILABLE | REAL PROPERTY LIENS USE | OTHER AVAILABLE | OTHER USE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | Yes | No | No |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | Yes | Yes | Yes | Yes | No | No | No | No | No | No | Yes | Yes | No | No |
| ARLINGTON WATER UTILITIES | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No |
| BOARD OF WATER SUPPLY HONOLULU | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | Yes |
| BOSTON WATER AND SEWER COMMISION | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | No | No | No |
| CHICAGO WATER DEPARTMENT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | Yes |
| CLEVELAND, DIVISION OF WATER | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No |
| DALLAS WATER UTILITIES | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| DES MOINES WATER WORKS | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | Yes | Yes | No | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No |
| ERIE COUNTY WATER AUTHORITY | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | Yes | Yes | No | No |
| FORT WORTH WATER DEPT | Yes | Yes | Yes | Yes | Yes | No | Yes | No | No | No | Yes | No | No | No |
| HELIX WATER DISTRICT | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | No | No | No | No |
| HOUSTON PUBLIC WORKS | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | Yes | Yes |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No |
| KNOXVILLE UTILITIES BOARD | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | No | No |
| LONG BEACH WATER DEPARTMENT | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | No | No | No | No |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes |
| LOUISVILLE WATER COMPANY | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No |
| MANCHESTER WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | Yes | Yes | Yes | Yes | No | No | Yes | No | No | No | No | No | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes | No | No |
| NEWPORT NEWS WATER WORKS | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | Yes | No |
| NORFOLK DEPT OF UTILTIES | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | Yes | Yes | No | No |
| ORLANDO UTILITIES COMMISSION | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | No | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | Yes | No | Yes | No | No | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SEATTLE WATER DEPARTMENT | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | No | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | Yes | Yes |
| ST. LOUIS WATER DIVISION | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | No | No | No | No |
| TACOMA, WATER DIVISION | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No | Yes | Yes | No | No |
| TAMPA WATER DEPT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | No | No | No |
| TUCSON WATER DEPARTMENT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes | Yes | No | No |
| VIRGINIA BEACH | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | Yes | Yes | Yes | Yes |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | Yes | Yes | Yes | Yes | No | No | No | No | No | No | No | No | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | No | No | Yes | Yes |

TABLE THIRTY

| ORGANIZATION NAME | RATE DIFFERENTIAL USED | AMT OF DIFFERENTIAL % > IN-CITY | HISTORICAL BASIS | COST OF SERVICE CALCULATION | STATE STATUTE/LOCAL ORDINANCE | OTHER (DESCRIBE) | ANY LEGAL CHALLENGES TO DIFFERENTIAL (DESCRIBE) |
|---|---|---|---|---|---|---|---|
| | RATE DIFFERENTIALS IN-CITY/OUT-CITY | | | | | | |
| AKRON PUBLIC UTILITIES BUREAU | Yes | 45-60% | No | Yes | No | No | CONTRACT VS. NONCONTRACT BASIS |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | N/A | N/A | N/A | N/A | N/A | No |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | N/A | N/A | N/A | N/A | N/A | No |
| ARLINGTON WATER UTILITIES | Yes | 100.0% | No | Yes | Yes | No | No |
| BOARD OF WATER SUPPLY HONOLULU | No | N/A | N/A | N/A | N/A | N/A | N/A |
| BOSTON WATER AND SEWER COMMISION | No | N/A | N/A | N/A | N/A | N/A | N/A |
| CHICAGO WATER DEPARTMENT | No | N/A | N/A | N/A | N/A | N/A | CONSUMERS OUTSIDE CITY FOR REDUCED RATE |
| CLEVELAND, DIVISION OF WATER | Yes | VARIES | No | No | No | SERVICE AGREEMENT W/SUBURBS | No |
| DALLAS WATER UTILITIES | No | N/A | N/A | N/A | N/A | N/A | No |
| DES MOINES WATER WORKS | Yes | 21.0% | No | Yes | No | No | POLK COUNTY SERVICE AREA |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | 100.0% | No | No | No | DISTRICT RESOLUTION | No |
| ERIE COUNTY WATER AUTHORITY | No | N/A | N/A | N/A | N/A | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | No | N/A | N/A | N/A | N/A | N/A | No |
| FORT WORTH WATER DEPT | Yes | 100.0% | Yes | No | Yes | No | No |
| HELIX WATER DISTRICT | No | N/A | N/A | N/A | N/A | N/A | N/A |
| HOUSTON PUBLIC WORKS | No | N/A | N/A | N/A | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | No | N/A | N/A | N/A | N/A | N/A | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | 17.0% | No | Yes | Yes | No | No |
| KNOXVILLE UTILITIES BOARD | Yes | 50.0% | Yes | No | No | No | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | N/A | N/A | N/A | N/A | N/A | N/A |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | No | Yes | No | No | No | No |
| LOUISVILLE WATER COMPANY | No | N/A | N/A | N/A | N/A | N/A | N/A |
| MANCHESTER WATER WORKS | Yes | 24.0% | No | Yes | No | No | TOWNS HAVE LEGAL COUNSEL AT PUC HEARINGS |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | Yes | 150.0% | Yes | No | No | No | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | 14.0% | No | Yes | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | Yes | 25.0% | No | No | Yes | No | No |
| NEWPORT NEWS WATER WORKS | No | N/A | N/A | N/A | N/A | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | Yes | N/A | N/A | N/A | N/A | USE THEIR CITY RATE | N/A |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | N/A | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | Yes | 25.0% | Yes | No | Yes | No | No |
| PASSAIC VALLEY WATER COMMISSION | Yes | 25.0% | Yes | No | No | No | No |
| PORTLAND BUREAU OF WATER WORKS | Yes | N/A | No | Yes | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | 100.0% | N/A | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | 150.0% | No | Yes | Yes | No | COURT ACTION TAKEN |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| SEATTLE WATER DEPARTMENT | Yes | N/A | No | Yes | No | No | No |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | No | N/A | N/A | N/A | N/A | N/A | N/A |
| ST. LOUIS WATER DIVISION | No | N/A | N/A | N/A | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | Yes | 20.0% | No | Yes | No | No | No |
| TAMPA WATER DEPT | Yes | 25.0% | No | No | Yes | No | No |
| TUCSON WATER DEPARTMENT | No | N/A | N/A | N/A | N/A | N/A | N/A |
| VIRGINIA BEACH | No | N/A | N/A | N/A | N/A | N/A | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | N/A | N/A | N/A | N/A | N/A | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | 100.0% | Yes | No | No | No | No |

# VI. WATER METERS

TABLE THIRTY-ONE VI. WATER METERS

| ORGANIZATION NAME | WHO OWNS / MAINTAINS METER | % OF SYSTEM METERED CUSTOMERS | METERED SALES | WHO IS RESPONSIBLE TO READ METER | % OF METERS READ: MONTHLY | QUARTERLY | SEMI-ANNUAL | ANNUALLY | OTHER | |
|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | UTILITY | 100.0% | 100.0% | UTILITY | 0.0% | 100.0% | 0.0% | 0.0% | | 0.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | UTILTIY | 15.0% | 12.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | UTILITY | 100.0% | 0.0% | UTILITY | 0.6% | 99.4% | 0.0% | 0.0% | | 0.0% |
| ARLINGTON WATER UTILITIES | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| BOARD OF WATER SUPPLY HONOLULU | UTILITY | 100.0% | 100.0% | UTILITY | 4.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 96.0% |
| BOSTON WATER AND SEWER COMMISION | UTILITY | 100.0% | N/A | UTILITY | 0.0% | 100.0% | 0.0% | 0.0% | | 0.0% |
| CHICAGO WATER DEPARTMENT | UTILITY | 31.0% | 78.0% | UTILITY | 19.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 81.0% |
| CLEVELAND, DIVISION OF WATER | UTILITY | 100.0% | 100.0% | UTILITY | 0.0% | 100.0% | 0.0% | 0.0% | | 0.0% |
| DALLAS WATER UTILITIES | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| DES MOINES WATER WORKS | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | UTILITY | 100.0% | 100.0% | UTILITY | 1.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 99.0% |
| ERIE COUNTY WATER AUTHORITY | UTILITY | 99.0% | 88.6% | CUSTOMER,UTILITY | 1.0% | 99.0% | 0.0% | 0.0% | | 0.0% |
| FAIRFAX COUNTY WATER AUTHORITY | UTILITY | 100.0% | 100.0% | UTILITY | 0.0% | 100.0% | 0.0% | 0.0% | | 0.0% |
| FORT WORTH WATER DEPT | UTILITY | 100.0% | N/A | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| HELIX WATER DISTRICT | UTILITY | 100.0% | N/A | UTILITY | 0.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 100.0% |
| HOUSTON PUBLIC WORKS | UTILITY | 100.0% | 99.0% | UTILITY | 98.0% | 0.0% | 0.0% | 0.0% | | 2.0% |
| HUNTSVILLE UTILITIES WATER DEPT | UTILITY | 100.0% | N/A | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | UTILITY | 99.9% | 99.9% | UTILITY | 4.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 96.0% |
| KNOXVILLE UTILITIES BOARD | UTILITY | 98.9% | 99.5% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| LAS VEGAS VALLEY WATER DISTRICT | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| LONG BEACH WATER DEPARTMENT | UTILITY | 100.0% | N/A | UTILITY | 2.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 98.0% |
| LOS ANGELES DEPT OF WATER AND POWER | UTILITY | 98.0% | N/A | UTILITY | 14.8% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 85.2% |
| LOUISVILLE WATER COMPANY | UTILTIY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 99.0% |
| MANCHESTER WATER WORKS | UTILTIY | 98.0% | 98.0% | UTILITY | 0.4% | 99.6% | 0.0% | 0.0% | | 0.0% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | UTILTIY | 100.0% | N/A | UTILTIY | 0.0% | 0.0% | 0.0% | 0.0% | WEEKLY 57%,CONTINOUS | 43% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | UTILITY | 100.0% | 100.0% | CUSTOMER,UTILITY | 2.5% | 97.5% | 0.0% | 0.0% | | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| MILWAUKEE WATER WORKS | UTILITY | 100.0% | 100.0% | UTILITY | 10.7% | 89.3% | 0.0% | 0.0% | | 0.0% |
| NEWPORT NEWS WATER WORKS | UTILITY | 100.0% | 100.0% | UTILITY | 3.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 97.0% |
| NORFOLK DEPT OF UTILTIES | UTILITY | 100.0% | 100.0% | UTILITY | 0.3% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 99.7% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| ORLANDO UTILITIES COMMISSION | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| PASSAIC VALLEY WATER COMMISSION | UTILITY | 99.0% | 99.0% | UTILITY | 5.0% | 95.0% | 0.0% | 0.0% | | 0.0% |
| PORTLAND BUREAU OF WATER WORKS | UTILITY | 100.0% | N/A | UTILITY | N/A | N/A | N/A | N/A | | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | UTILITY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| SALT LAKE CITY PUBLIC UTILITIES | UTILITY | 99.0% | 99.0% | UTILITY | 70.0% | 0.0% | 1.0% | 0.0% | BIMONTHLY | 29.0% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | UTILTIY | 100.0% | 100.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| SEATTLE WATER DEPARTMENT | UTILITY | 100.0% | 100.0% | UTILITY | 5.0% | 0.0% | 0.0% | 0.0% | EVERY FOUR MONTHS | 95.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | UTILITY | 100.0% | N/A | UTILITY | 0.6% | 98.8% | 0.0% | 0.0% | | 0.6% |
| ST. LOUIS WATER DIVISION | CUST OWNS | 20.0% | 60.0% | UTILITY | 0.0% | 100.0% | 0.0% | 0.0% | | 0.0% |
| TACOMA, WATER DIVISION | CUST OWNS | 100.0% | 100.0% | UTILITY | 10.0% | 90.0% | 0.0% | 0.0% | | 0.0% |
| TAMPA WATER DEPT | UTILITY | 100.0% | 100.0% | UTILITY | 0.5% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 95.5% |
| TUCSON WATER DEPARTMENT | UTILITY | 99.0% | 99.0% | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |
| VIRGINIA BEACH | UTILITY | 100.0% | 100.0% | UTILITY | 0.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 100.0% |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | UTILITY | 100.0% | 100.0% | UTILITY | 1.0% | 0.0% | 0.0% | 0.0% | BIMONTHLY | 99.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | UTILITY | 100.0% | N/A | UTILITY | 100.0% | 0.0% | 0.0% | 0.0% | | 0.0% |

TABLE THIRTY-TWO

| ORGANIZATION NAME | No. OF METER IN SYSTEM (IN-CITY) | No. OF METER IN SYSTEM (OUT-CITY) | METHOD OF READING METERS REMOTE (%) | PART REMOTE (%) | MANUAL (%) | SIZE OF METER READING CREW RESIDENTIAL | COMMERCIAL | INDUSTRIAL | FIRELINES | OTHER |
|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | 79,900 | 5,470 | 0% | 100% | 0% | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 |
| ANCHORAGE WATER & WASTEWATER UTILITY | 6,043 | 0 | 0% | 0% | 100% | 0.00 | 3.00 | 0.00 | 0.00 | 0.00 |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 67,000 | N/A | 0% | 100% | 0% | 1.00 | 2 | | 0.00 | 0.00 |
| ARLINGTON WATER UTILITIES | 71,200 | 300 | 0% | 100% | 0% | N/A | N/A | N/A | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | 60,007 | 77,316 | 0% | 100% | 0% | | 9 | | | |
| BOSTON WATER AND SEWER COMMISION | 86,000 | | 0% | 63% | 37% | | 11 | | | |
| CHICAGO WATER DEPARTMENT | 152,459 | 300 | 8% | N/A | N/A | 1.00 | 1.00 | 2.00 | 2.00 | 2.00 |
| CLEVELAND, DIVISION OF WATER | 140,000 | 235,000 | 0% | 100% | 0% | 8.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| DALLAS WATER UTILITIES | 280,000 | 0 | N/A | N/A | N/A | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| DES MOINES WATER WORKS | 63,500 | 4,400 | 3% | 92% | 8% | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 345,000 | 20 | 1% | 0% | 99% | N/A | N/A | N/A | N/A | N/A |
| ERIE COUNTY WATER AUTHORITY | 107,600 | 0 | 1% | 1% | 98% | 5.00 | 0.00 | 2.00 | 0.00 | 0.00 |
| FAIRFAX COUNTY WATER AUTHORITY | 170,000 | 0 | 0% | 0% | 100% | | 2 | | | |
| FORT WORTH WATER DEPT | 154,974 | 200 | 0% | 100% | 0% | N/A | N/A | N/A | N/A | N/A |
| HELIX WATER DISTRICT | 52,511 | 0 | 0% | 100% | 0% | | 5 | | | |
| HOUSTON PUBLIC WORKS | 379,671 | 0 | 0% | 100% | 0% | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 |
| HUNTSVILLE UTILITIES WATER DEPT | 56618.00 | 0 | 0% | 0% | 100% | 1.00 | 0.00 | 2.00 | 0.00 | 0.00 |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 140,000 | 0 | 0% | 0% | 100% | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| KNOXVILLE UTILITIES BOARD | 51,530 | 9,069 | 0% | 100% | 0% | | 9 | | | |
| LAS VEGAS VALLEY WATER DISTRICT | 130,342 | 0 | 0% | N/A | N/A | 1.00 | 2.00 | 2.00 | 2.00 | 0.00 |
| LONG BEACH WATER DEPARTMENT | 87,000 | 100 | 0% | 100% | 0% | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | 705,475 | 0 | 0% | 100% | 0% | N/A | N/A | N/A | N/A | N/A |
| LOUISVILLE WATER COMPANY | 85,360 | 121,540 | 0% | 0% | 100% | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 |
| MANCHESTER WATER WORKS | 23,598 | 2,622 | 100% | 0% | 0% | | 2 | | | |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 150 | 0 | 43% | 0% | 57% | 0.00 | 0.00 | 0.00 | 0.00 | 2.00 |
| MEMPHIS LIGHT, GAS & WATER DIVISION | 175,715 | 29,285 | 0% | 100% | 0% | 1.00 | 1.00 | 1.00 | 0.00 | 0.00 |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 82,700 | 5,300 | 0% | 0% | 100% | 7.00 | 4.00 | 0.00 | 0.00 | 1.00 |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | 441 | 0 | 0% | 0% | 100% | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| MILWAUKEE WATER WORKS | 143,767 | 12,568 | 15% | 85% | 0% | 23.00 | 0.00 | 3.00 | 0.00 | 4.00 |
| NEWPORT NEWS WATER WORKS | 41,941 | 54,712 | 0% | 100% | 0% | | 7 | | | |
| NORFOLK DEPT OF UTILTIES | 66,198 | 0 | 0% | 0% | 100% | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 41,385 | N/A | 0% | 0% | 100% | 1.00 | 1.00 | 0.00 | 0.00 | 0.00 |
| ORLANDO UTILITIES COMMISSION | 45,285 | 51,462 | 0% | 100% | 0% | | 28 | | | |
| PASSAIC VALLEY WATER COMMISSION | 48,000 | 4,000 | 0% | 50% | 50% | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 143,000 | 55 | 0% | 0% | 100% | | 14 | | | |
| RALEIGH DEPT OF PUBLIC UTILITIES | 64,561 | 2,766 | 0% | 0% | 100% | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| SALT LAKE CITY PUBLIC UTILITIES | 52,542 | 30,797 | 2% | 0% | 98% | 1.00 | 2.00 | 2.00 | 1.00 | 0.00 |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 40,000 | 0 | 0% | 0% | 100% | | 7 | | | |
| SEATTLE WATER DEPARTMENT | 155,700 | 15,091 | 0% | 0% | 100% | 1.00 | 1.00 | 1.00 | 0.00 | 2.00 |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 95,366 | 0 | 97% | 3% | 0% | 1.00 | 1.00 | 1.00 | 1.00 | 2.00 |
| ST. LOUIS WATER DIVISION | 19,000 | 0 | 0% | 10% | 90% | | 5 | | | |
| TACOMA, WATER DIVISION | 56,200 | 17,700 | 0% | 0% | 100% | N/A | N/A | N/A | N/A | N/A |
| TAMPA WATER DEPT | 86,500 | 24,080 | 0% | 100% | 0% | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| TUCSON WATER DEPARTMENT | 105,000 | 45,000 | 0% | 0% | 100% | | 24 | | | |
| VIRGINIA BEACH | 100,000 | 0 | 0% | 100% | 0% | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | 0% | 100% | 0% | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 120,702 | 4,664 | 0% | 90% | 10% | | 14 | | | |

TABLE THIRTY-THREE

| ORGANIZATION NAME | AVERAGE No. OF METERS READ PER DAY | | | | | TYPICAL RANGE OF EST. READS | |
|---|---|---|---|---|---|---|---|
| | RESIDENTIAL | COMMERCIAL | INDUSTRIAL | FIRELINES | OTHER | (%) | ERROR |
| AKRON PUBLIC UTILITIES BUREAU | 112.00 | 0.00 | 100.00 | 0.00 | 0.00 | > 20% | N/A |
| ANCHORAGE WATER & WASTEWATER UTILITY | 0.00 | 0.00 | 125.00 | 0.00 | 0.00 | 0-1% | 0-1% |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | 185.00 | 70.00 | 0.00 | 0.00 | 0.00 | 0-1% | 0-1% |
| ARLINGTON WATER UTILITIES | 350 | | | | | 0-1% | 0-1% |
| BOARD OF WATER SUPPLY HONOLULU | 220 | | | | | 2-5% | 2-5% |
| BOSTON WATER AND SEWER COMMISION | 156 | | | | | > 20% | 11-20% |
| CHICAGO WATER DEPARTMENT | 2448.00 | 1135.00 | 153.00 | 101.00 | 0.00 | > 20% | 2-5% |
| CLEVELAND, DIVISION OF WATER | 350.00 | 40.00 | 0.00 | 0.00 | 0.00 | 2-5% | 0-1% |
| DALLAS WATER UTILITIES | 400 | | 100.00 | N/A | 0.00 | 0-1% | 2-5% |
| DES MOINES WATER WORKS | 450.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0-1% | 11-20% |
| EAST BAY MUNICIPAL UTILITY DISTRICT | 430.00 | 50.00 | 50.00 | 0.00 | 0.00 | 0-1% | 0-1% |
| ERIE COUNTY WATER AUTHORITY | 130.00 | 0.00 | 55.00 | 0.00 | 0.00 | > 20% | 11-20% |
| FAIRFAX COUNTY WATER AUTHORITY | 300 | | | | | 0-1% | N/A |
| FORT WORTH WATER DEPT | 600 | | | | | 0-1% | 0-1% |
| HELIX WATER DISTRICT | 328 | | | | | 0-1% | 0-1% |
| HOUSTON PUBLIC WORKS | 6.00 | 0.00 | 34.00 | 0.00 | 0.00 | 2-5% | 6-10% |
| HUNTSVILLE UTILITIES WATER DEPT | 210.00 | 0.00 | 41.00 | 0.00 | 0.00 | 2-5% | 2-5% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | 215.00 | 180.00 | 180.00 | 0.00 | 0.00 | 6-10% | 6-10% |
| KNOXVILLE UTILITIES BOARD | 325 | | | | | 0-1% | 0-1% |
| LAS VEGAS VALLEY WATER DISTRICT | 550.00 | 250.00 | 250.00 | 0.00 | 0.00 | 2-5% | 0-1% |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | 435 | | 0.00 | 0.00 | 0.00 | 0-1% | 0-1% |
| LOUISVILLE WATER COMPANY | 550.00 | 300.00 | 125.00 | 0.00 | 0.00 | 0-1% | 6-10% |
| MANCHESTER WATER WORKS | 300.00 | 100.00 | 50.00 | 0.00 | 0.00 | 2-5% | 0-1% |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | 0.00 | 0.00 | 0.00 | 0.00 | 30.00 | NONE | N/A |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | 125.00 | 125.00 | 50.00 | 0.00 | 0.00 | > 20% | 2-5% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | N/A | N/A | N/A | N/A | N/A | 0-1% | 2-5% |
| MILWAUKEE WATER WORKS | 135.00 | 0.00 | 40.00 | 0.00 | 0.00 | > 20% | 11-20% |
| NEWPORT NEWS WATER WORKS | 240 | | | | | 0-1% | 0-1% |
| NORFOLK DEPT OF UTILTIES | 210 | | | | | 1% | 1% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | 300.00 | 200.00 | 0.00 | 0.00 | 0.00 | 0-1% | N/A |
| ORLANDO UTILITIES COMMISSION | 371 | | | | | 0-1% | 0-1% |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | 255.00 | 122.00 | 122.00 | 122.00 | 0.00 | 0-1% | 0-1% |
| RALEIGH DEPT OF PUBLIC UTILITIES | 300.00 | 300.00 | 300.00 | 300.00 | 0.00 | 6-10% | 6-10% |
| SALT LAKE CITY PUBLIC UTILITIES | 300.00 | 126.00 | 126.00 | 126.00 | 0.00 | 0-1% | 0-1% |
| SAN BERNARDINO MUNICIPAL WATER DEPT | 350 | | | | | 0-1% | 0-1% |
| SEATTLE WATER DEPARTMENT | 300.00 | 100.00 | 60.00 | 0.00 | 50.00 | 2-5% | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | 300.00 | 60.00 | 60.00 | 60.00 | 0.00 | 2-5% | 0-1% |
| ST. LOUIS WATER DIVISION | 100 | | | | | 2-5% | 0-1% |
| TACOMA, WATER DIVISION | 300 | | | | | 0-1% | 6-10% |
| TAMPA WATER DEPT | 375 | | | | | 2-5% | N/A |
| TUCSON WATER DEPARTMENT | 350 | | | | | 0-1% | N/A |
| VIRGINIA BEACH | 250.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0-1% | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | 405.00 | 115.00 | 0.00 | 0.00 | 0.00 | 0-1% | 2-5% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | 470 | | 195 | | 0.00 | 0-1% | 2-5% |

# VII. SYSTEM PLANNING AND REPORTING

TABLE THIRTY-FOUR VII. SYSTEM PLANNING AND REPORTING

AMWA RATE SURVEY

| ORGANIZATION NAME | ANNUAL REPORT | ANNUAL FINANCIAL REPORT & PLAN | WATER CONSERVATION PLAN | WATER RESOURCES PLAN | DROUGHT CONTINGENCY PLAN | CONTAMINATION EMERGENCY RESPONSE PLAN | ENG./PLANNING CAPITAL IMPROV. PLAN | WATERSHED MANAGEMENT PLAN | ARE PLANS AVAILABLE TO MEMBERS | WATER CONSERVATION PROGRAM |
|---|---|---|---|---|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | Yes | Yes | Yes | No | Yes | Yes | No | N/A | Yes |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | Yes | Yes | Yes | No | Yes | No | Yes | No | N/A | Yes |
| ARLINGTON WATER UTILITIES | No | Yes | No | No | No | Yes | Yes | Yes | N/A | Yes |
| BOARD OF WATER SUPPLY HONOLULU | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes | No | Yes |
| BOSTON WATER AND SEWER COMMISION | Yes | N/A | Yes | N/A | Yes | N/A | Yes | No | Yes | Yes |
| CHICAGO WATER DEPARTMENT | Yes | Yes | No | No | No | No | Yes | No | No | Yes |
| CLEVELAND, DIVISION OF WATER | Yes | Yes | No | No | No | No | Yes | No | N/A | No |
| DALLAS WATER UTILITIES | Yes | Yes | Yes | No | Yes | Yes | Yes | Yes | Yes | Yes |
| DES MOINES WATER WORKS | Yes | No | No | Yes | No | No | Yes | No | Yes | No |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes |
| ERIE COUNTY WATER AUTHORITY | Yes | No | No | No | No | Yes | Yes | No | No | No |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| FORT WORTH WATER DEPT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| HELIX WATER DISTRICT | Yes | Yes | Yes | No | Yes | Yes | Yes | No | N/A | Yes |
| HOUSTON PUBLIC WORKS | N/A | Yes | N/A | N/A | N/A | N/A | N/A | Yes | Yes | Yes |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | No | No | Yes | Yes | Yes | No | No | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | No | N/A | N/A | N/A | N/A | Yes | No | N/A | No | No |
| KNOXVILLE UTILITIES BOARD | Yes | Yes | No | No | No | Yes | Yes | No | N/A | No |
| LAS VEGAS VALLEY WATER DISTRICT | No | Yes | No | No | No | No | Yes | No | N/A | N/A |
| LONG BEACH WATER DEPARTMENT | Yes | Yes | Yes | No | Yes | Yes | Yes | No | Yes | Yes |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | No | Yes |
| LOUISVILLE WATER COMPANY | Yes | Yes | No | No | No | Yes | Yes | No | N/A | No |
| MANCHESTER WATER WORKS | Yes | Yes | No | Yes | No | Yes | Yes | Yes | Yes | No |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | Yes | Yes | Yes | Yes | Yes | NO | Yes | Yes | Yes | Yes |
| MEMPHIS LIGHT, GAS & WATER DIVISION | Yes | N/A | No | Yes | No | Yes | Yes | No | Yes | No |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | Yes | Yes | Yes | Yes | Yes | Yes | No | Yes | Yes |
| MILWAUKEE WATER WORKS | Yes | Yes | No | No | No | Yes | Yes | Yes | Yes | No |
| NEWPORT NEWS WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| NORFOLK DEPT OF UTILTIES | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | Yes | No | No | No | No | Yes | No | No | No |
| ORLANDO UTILITIES COMMISSION | Yes | Yes | Yes | Yes | Yes | No | Yes | No | Yes | Yes |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A | Yes | Yes | No |
| PORTLAND BUREAU OF WATER WORKS | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| RALEIGH DEPT OF PUBLIC UTILITIES | No | No | Yes | N/A | N/A | N/A | Yes | N/A | N/A | Yes |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | Yes | N/A | N/A | Yes | Yes | Yes | Yes | Yes | No |
| SAN BERNARDINO MUNICIPAL WATER DEPT | N/A | Yes | Yes | No | No | Yes | Yes | No | No | Yes |
| SEATTLE WATER DEPARTMENT | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | N/A | N/A | Yes | Yes | Yes | Yes | Yes | Yes | No |
| ST. LOUIS WATER DIVISION | Yes | No | No | No | No | Yes | Yes | No | No | No |
| TACOMA, WATER DIVISION | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |

TABLE THIRTY-FIVE

| ORGANIZATION NAME | WATER CONSERVATION PROGRAM | | | | | | |
|---|---|---|---|---|---|---|---|
| | RESIDENTIAL RETROFIT | COMMERCIAL/ INDUSTRIAL RETROFIT | RETROFIT SUPPORTED BY ORDINANCE | PUBLIC AWARENESS PROGRAMMING | LANDSCAPE PROGRAMS RESIDENTIAL | COMMERCIAL | LARGE TURF |
| AKRON PUBLIC UTILITIES BUREAU | Yes | No | No | No | Yes | Yes | Yes |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | No | No | Yes | Yes | Yes | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | N/A | N/A | N/A | Yes | No | No | No |
| ARLINGTON WATER UTILITIES | N/A | N/A | N/A | Yes | Yes | Yes | Yes |
| BOARD OF WATER SUPPLY HONOLULU | Yes | Yes | Yes | Yes | No | No | No |
| BOSTON WATER AND SEWER COMMISION | Yes | No | No | Yes | No | No | No |
| CHICAGO WATER DEPARTMENT | No | No | No | Yes | No | No | No |
| CLEVELAND, DIVISION OF WATER | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| DALLAS WATER UTILITIES | Yes | N/A | No | Yes | No | No | No |
| DES MOINES WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | Yes | No | Yes | Yes | Yes | No |
| ERIE COUNTY WATER AUTHORITY | N/A | N/A | N/A | No | Yes | Yes | No |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| FORT WORTH WATER DEPT | No | No | N/A | Yes | Yes | Yes | No |
| HELIX WATER DISTRICT | No | No | No | Yes | No | No | No |
| HOUSTON PUBLIC WORKS | N/A | N/A | N/A | Yes | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | Yes | No | No | No | No |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | No | No | No | Yes | No | No | No |
| LONG BEACH WATER DEPARTMENT | N/A | N/A | N/A | Yes | No | No | Yes |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| LOUISVILLE WATER COMPANY | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MANCHESTER WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | Yes | No | No | Yes | No | No | No |
| MEMPHIS LIGHT, GAS & WATER DIVISION | No | N/A | N/A | N/A | Yes | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | No | No | Yes | No | No | No |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | Yes | N/A | Yes | Yes | Yes | Yes |
| MILWAUKEE WATER WORKS | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | No | No | No | Yes | N/A | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | No | N/A | N/A | Yes | No | No | No |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | No | No | No | Yes | No | No | No |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| PORTLAND BUREAU OF WATER WORKS | N/A | N/A | N/A | Yes | No | No | No |
| RALEIGH DEPT OF PUBLIC UTILITIES | N/A | N/A | N/A | Yes | No | No | No |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | N/A | N/A | Yes | No | No | Yes |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | No | No | N/A | No | No | No |
| SEATTLE WATER DEPARTMENT | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| ST. LOUIS WATER DIVISION | No | N/A | N/A | N/A | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | No | No | No | Yes | No | No | Yes |
| TAMPA WATER DEPT | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| TUCSON WATER DEPARTMENT | No | No | N/A | Yes | Yes | Yes | Yes |
| VIRGINIA BEACH | No | No | No | Yes | No | No | No |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | N/A | N/A | N/A | N/A | No | No | No |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | No | No | No | Yes | No | No | No |

TABLE THIRTY-SIX

| ORGANIZATION NAME | WATER CONSERVATION PROGRAM: YOUTH EDUCATION ELEMENTARY | YOUTH EDUCATION SECONDARY | LEAK DETECTION PROGRAM | DESCRIBE IMPACT OF WATER CONSERVATION PROGAM ON WATER DEMAND |
|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | No | No | No | NEVER ACTIVATED PLAN |
| ANCHORAGE WATER & WASTEWATER UTILITY | Yes | Yes | Yes | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | No | Yes | N/A |
| ARLINGTON WATER UTILITIES | Yes | No | No | N/A |
| BOARD OF WATER SUPPLY HONOLULU | Yes | Yes | Yes | EST. 6-7% REDUCED CONSUMPTION |
| BOSTON WATER AND SEWER COMMISION | Yes | Yes | Yes | REDUCED UNACCOUNTED WATER |
| CHICAGO WATER DEPARTMENT | Yes | No | Yes | N/A |
| CLEVELAND, DIVISION OF WATER | N/A | N/A | Yes | N/A |
| DALLAS WATER UTILITIES | Yes | Yes | Yes | N/A |
| DES MOINES WATER WORKS | N/A | N/A | Yes | UNACCOUNTED FOR WATER LOSS REDUCED |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | Yes | Yes | 25% REDUCTION |
| ERIE COUNTY WATER AUTHORITY | Yes | No | Yes | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A |
| FORT WORTH WATER DEPT | Yes | Yes | Yes | N/A |
| HELIX WATER DISTRICT | Yes | Yes | No | N/A |
| HOUSTON PUBLIC WORKS | Yes | Yes | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | No | No | Yes | N/A |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | N/A | N/A | Yes | N/A |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | N/A | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | No | Yes | N/A |
| LONG BEACH WATER DEPARTMENT | Yes | No | Yes | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | Yes | Yes | PUBLIC IS RESPONSIVE |
| LOUISVILLE WATER COMPANY | N/A | N/A | No | N/A |
| MANCHESTER WATER WORKS | N/A | N/A | N/A | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | Yes | Yes | Yes | CUT DEMAND,MAINTAIN W/IN SAFE YIELD |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | Yes | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | Yes | Yes | N/A |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | Yes | Yes | SAVED 200,000 ACRE FEET/YEAR |
| MILWAUKEE WATER WORKS | N/A | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | N/A | N/A | Yes | REDUCE PRESSURE AT PLANT,REDUCE DEMAND |
| NORFOLK DEPT OF UTILTIES | Yes | Yes | Yes | REDUCED DEMAND BY 5-10% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | Yes | Yes | Yes | NOT MEASURABLE |
| PASSAIC VALLEY WATER COMMISSION | N/A | N/A | Yes | N/A |
| PORTLAND BUREAU OF WATER WORKS | Yes | No | Yes | N/A |
| RALEIGH DEPT OF PUBLIC UTILITIES | No | No | Yes | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | Yes | No | Yes | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | N/A | Yes | N/A |
| SEATTLE WATER DEPARTMENT | Yes | Yes | Yes | N/A |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | N/A | N/A | Yes | N/A |
| ST. LOUIS WATER DIVISION | N/A | N/A | Yes | N/A |
| TACOMA, WATER DIVISION | Yes | No | No | N/A |
| TAMPA WATER DEPT | No | No | No | N/A |
| TUCSON WATER DEPARTMENT | Yes | Yes | No | PER CAPITA REDUCED BY 20% |
| VIRGINIA BEACH | Yes | Yes | No | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | No | No | Yes | N/A |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | Yes | Yes | REDUCED LOSS TO 10% & USE BY 10% |

TABLE THIRTY-SEVEN

| ORGANIZATION NAME | LEAKAGE ESTIMATE | LEAKAGE % TRANSMISSION SYSTEM | DISTRIBUTION SYSTEM | STORAGE RESERVOIRS | OTHER |
|---|---|---|---|---|---|
| AKRON PUBLIC UTILITIES BUREAU | Yes | 5.0% | 73.0% | 2.0% | 20.0% |
| ANCHORAGE WATER & WASTEWATER UTILITY | No | N/A | N/A | N/A | N/A |
| ANNE ARUNDEL COUNTY DEPT OF UTILITIES | No | N/A | N/A | N/A | N/A |
| ARLINGTON WATER UTILITIES | No | N/A | N/A | N/A | N/A |
| BOARD OF WATER SUPPLY HONOLULU | No | N/A | N/A | N/A | N/A |
| BOSTON WATER AND SEWER COMMISION | Yes | N/A | 21.0% | N/A | N/A |
| CHICAGO WATER DEPARTMENT | No | N/A | N/A | N/A | N/A |
| CLEVELAND, DIVISION OF WATER | Yes | N/A | N/A | N/A | N/A |
| DALLAS WATER UTILITIES | Yes | N/A | N/A | N/A | N/A |
| DES MOINES WATER WORKS | Yes | N/A | N/A | N/A | N/A |
| EAST BAY MUNICIPAL UTILITY DISTRICT | Yes | N/A | N/A | N/A | N/A |
| ERIE COUNTY WATER AUTHORITY | No | N/A | N/A | N/A | N/A |
| FAIRFAX COUNTY WATER AUTHORITY | N/A | N/A | N/A | N/A | N/A |
| FORT WORTH WATER DEPT | Yes | 4.0% | 8.0% | 0.0% | 88.0% |
| HELIX WATER DISTRICT | Yes | N/A | N/A | N/A | N/A |
| HOUSTON PUBLIC WORKS | N/A | N/A | N/A | N/A | N/A |
| HUNTSVILLE UTILITIES WATER DEPT | Yes | 20.0% | 80.0% | 0.0% | 0.0% |
| KANSAS CITY, MO WTR & POLL. CONTROL DEPT | Yes | 11.0% | 86.0% | 3.0% | 0.0% |
| KNOXVILLE UTILITIES BOARD | N/A | N/A | N/A | N/A | N/A |
| LAS VEGAS VALLEY WATER DISTRICT | Yes | 10.0% | 80.0% | 10.0% | 0.0% |
| LONG BEACH WATER DEPARTMENT | Yes | N/A | N/A | N/A | N/A |
| LOS ANGELES DEPT OF WATER AND POWER | Yes | N/A | N/A | N/A | N/A |
| LOUISVILLE WATER COMPANY | N/A | N/A | N/A | N/A | N/A |
| MANCHESTER WATER WORKS | No | N/A | N/A | N/A | N/A |
| MASSACHUSETTS WATER RESOURCES AUTHORITY | Yes | 40.0% | 56.0% | 2.0% | 2.0% |
| MEMPHIS LIGHT, GAS & WATER DIVISION | N/A | N/A | N/A | N/A | N/A |
| METROPOLITAN DISTRICT(MDC) HARTFORD, CT | Yes | 2.0% | 5.0% | 0.0% | 0.0% |
| METROPOLITAN WATER DISTRICT OF S. CALIF. | Yes | N/A | N/A | N/A | N/A |
| MILWAUKEE WATER WORKS | N/A | N/A | N/A | N/A | N/A |
| NEWPORT NEWS WATER WORKS | No | N/A | N/A | N/A | N/A |
| NORFOLK DEPT OF UTILTIES | Yes | 20.0% | 80.0% | 0.0% | 0.0% |
| ORANGE COUNTY PUBLIC UTILITIES DIVISION | No | N/A | N/A | N/A | N/A |
| ORLANDO UTILITIES COMMISSION | No | N/A | N/A | N/A | N/A |
| PASSAIC VALLEY WATER COMMISSION | Yes | 5.0% | 5.0% | 5.0% | 0.0% |
| PORTLAND BUREAU OF WATER WORKS | Yes | 15.0% | 48.0% | 27.0% | 10.0% |
| RALEIGH DEPT OF PUBLIC UTILITIES | Yes | N/A | N/A | N/A | N/A |
| SALT LAKE CITY PUBLIC UTILITIES | N/A | N/A | N/A | N/A | N/A |
| SAN BERNARDINO MUNICIPAL WATER DEPT | Yes | 20.0% | 80.0% | 0.0% | 0.0% |
| SEATTLE WATER DEPARTMENT | Yes | 34.0% | 60.0% | 6.0% | 0.0% |
| SOUTH CENTRAL CONN. REGIONAL WTR AUTH. | Yes | 0.0% | 100.0% | 0.0% | 0.0% |
| ST. LOUIS WATER DIVISION | No | N/A | N/A | N/A | N/A |
| TACOMA, WATER DIVISION | Yes | N/A | N/A | N/A | N/A |
| TAMPA WATER DEPT | Yes | 0.0% | 100.0% | 0.0% | 0.0% |
| TUCSON WATER DEPARTMENT | Yes | 5.0% | N/A | 5.0% | 0.0% |
| VIRGINIA BEACH | No | N/A | N/A | N/A | N/A |
| WATER WORKS BOARD OF THE CITY OF BIRMINGHAM | Yes | 1.0% | 98.0% | 1.0% | 0.0% |
| WATER & WASTEWATER DEPT. CITY OF TULSA, OK. | Yes | 10.0% | 90.0% | 0.0% | 0.0% |